

PRICE CONTROL AND PROFITABILITY ASSESSMENT UNDER THE COMMERCE ACT 1975

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I INTRODUCTION

The Minister of Trade and Industry stated, in a recent speech, that although continued resort to widespread price control was to be avoided, the Positive List of Controlled Goods and Services would remain and, if necessary, would be added to if the market sector could not discipline itself.¹ Given the continued existence of Positive List price control it is appropriate to examine its administration, to date, under the Commerce Act 1975. To this end this article evaluates the decisions of the Commerce Commission in determining pricing appeals under Part IV of the Act. Of major concern is the manner in which the profitability test in section 98 has been interpreted and applied by the Secretary of Trade and Industry, as pricing authority of first instance, and by the Commerce Commission as a judicial and appellate body. The profitability criterion has been one of the most frequently argued grounds in justifying the need for a price increase and has been central to a number of pricing appeals. It also

¹ Economic Summit Conference, 14 September 1984

constitutes the means by which the magnitude of the allowed price increase is determined.

The article comprises four main parts. The first outlines the historical context from which the present pricing legislation evolved. The current pricing legislation is described in Part II and the issue of whether these provisions are or can be interpreted in a manner consistent with the intent and objects of a competition oriented statute is discussed. Part III follows by examining the profitability criterion as it has been interpreted and applied by the respective pricing authorities. Prominent and recurring issues in their decisions have been the questions of the appropriate profit rate to use in determining prices, the definition and measurement of the profit rate and the most appropriate method for ascertaining its adequacy or reasonableness. The Commission's determination of these issues and the adequacy of the statutory profitability test itself are evaluated from an accounting and economic perspective. This leads in Part IV to conclusions and recommendations both as to the policy approach and methods of profitability assessment most appropriate to New Zealand Positive List pricing policy as expressed in the Commerce Act.

II HISTORICAL INFLUENCES

The Commerce Act 1975 is distinctive in that it consolidates all trade practices, monopoly, merger and price control legislation within the one Act subject to the same statutory objects. This is a product of historical factors influenced by social attitudes towards economic and trade regulation. In order to understand the manner in which the present pricing legislation has been administered it is first necessary to briefly refer to previous major pricing legislation. Prior policy approaches and procedures have had a significant, and it is submitted an inappropriate, influence on the administration and development of price policy under the Commerce Act.

On the outbreak of the Second World War direct and comprehensive price controls were introduced under the Control of Prices Emergency Regulations 1939 which also established the Price Tribunal.² The substance of these emergency regulations was incorporated into the Control of Prices Act 1947 which in turn was re-enacted in the Commerce Act 1975.

The 1947 Act removed price control from the sphere of temporary emergency regulations and provided for continuing comprehensive controls as a stabilisation measure in a peacetime economy. The Act controlled the prices of all goods and services other than those specifically exempt or supplied by government. At this time New Zealand could not be regarded as a manufacturing country. As a result the formulation of price policy was not oriented towards improving the efficiency of industrial performance or of directing its development. Instead it was predominantly regulatory in nature designed to promote price stability and protect the consumer against unreasonable price increases and profiteering. This regulatory attitude was facilitated by the lack of effective provisions for the control of anticompetitive practices and monopolies.

During the 1950's a free enterprise philosophy prevailed leading to a termination of general price controls. Items remaining under control were

² Direct price controls first emerged during the First World War and were expressed in a succession of Acts. However, only a limited number of essential goods were subjected to control and these controls were adopted reluctantly.

listed on a Positive List of Controlled Goods and Services. This marked a transition from a policy of general control with prescribed exemptions to one of selective control in situations where competition was ineffective. Competition, as a means of preventing price increases, became an alternative to price control. The enactment of the Trade Practices Act 1958 was intended to strengthen competition through eliminating private price fixing and other obstructive practices and thereby to reduce the need for direct price control. The Act established the Trade Practices and Prices Commission which was empowered, *inter alia*, to exercise the price control functions conferred on the Price Tribunal.

During the 1970's rising rates of inflation led to a return to the use of comprehensive price controls as a stabilisation measure. Experiments of short duration were made with various types of price regulation and in 1972 the Stabilisation of Prices Regulations issued under the Economic Stabilisation Act 1948 reintroduced blanket price controls. Goods and services were classified into two categories — A and B. Category A goods and services were subject to strict price control under which prices could not be increased without prior approval of the Price Tribunal. These goods subsequently became subject to control under the provisions of the Commerce Act.

Concern about inflation and dissatisfaction about the multitude of pricing regulations also manifested itself in a demand for a strengthened competition policy. The result was the Commerce Act 1975 which not only consolidated but also changed and extended New Zealand competition and pricing legislation.

Subsequent developments are relevant in that they indicate the motivation underlying a changing policy emphasis. Since 1975 the emergence of economic recession accompanied by persistently high rates of inflation, a deteriorating balance of payments position and declining terms of overseas trade has forced a search for greater productivity, efficiency and export competitiveness. To this end, policy measures were, in some sectors, directed towards progressively removing controls and protection with the object of increasing competition. In line with these developments there has since 1979 been a progressive reduction in the number of goods subject to price control under the Commerce Act. The policy has been to remove goods from control where competition is considered sufficiently effective in restraining price rises. Reliance was placed on the reporting provisions of the 1979 Price Surveillance Regulations, the anti-profiteering provisions of the Commerce Act and consumer awareness to counter, *ex-post*, any misuse of pricing power. Also repealed in 1979 were the Stabilisation of Prices Regulations 1974 which by this time were widely regarded as a failure. They were seen as complex and to have engendered a cost-plus attitude and non-competitive pricing behaviour. Nevertheless under these regulations pricing procedures, principles and regulatory attitudes were established which, in large measure, have been carried over into the administration of price policy under the Commerce Act.

Since 1982 there have been a number of across-the-board stabilisation policies aimed at moderating rising rates of inflation. The first of these in June 1982 introduced a comprehensive package of anti-inflation measures. With certain exceptions the prices of most goods and services were frozen for 12 months. These regulations were extended to 29 February 1984

following failure to agree on and formulate a long term prices and incomes policy. They were succeeded by the Economic Stabilisation (Prices) Regulations 1983 which instituted a system of price surveillance over most goods and services as from 1 March 1984. They also provided for a member of the Commerce Commission to determine applications for review of the Secretary's pricing decisions under these regulations. This legislation was short-lived. It was revoked in July 1984 by the Price Freeze Regulations 1984 upon election of the Labour Government. These latter regulations froze the prices of most goods and services for a 3 month period subsequently extended to 8 November 1984. These pervasive controls are, in part, responsible for the failure of Positive List pricing policy under the Commerce Act to evolve in a manner consistent with the intent and objects of a competition statute. The following section therefore reviews the substance and role of Positive List pricing legislation within the Commerce Act.

III THE LEGISLATION: ITS COMPATIBILITY WITH COMPETITION POLICY

(1) *Positive List Pricing Legislation (Section 82)*

The Commerce Act is based on the premise that effective competition is the best form of economic regulation and is, in the absence of evidence to the contrary, desirable in the public interest. The intent of the legislation is evidenced by the Long Title to the Act and the statutory objects:

Long Title: An Act to promote the interests of consumers and the effective and efficient development of industry and commerce through the encouragement of competition, to prevent mischiefs that may result from monopolies, mergers, and takeovers and from trade practices . . . and to provide for the regulation, where necessary, of the prices of goods and services.

General objects section 2A:

- (a) The promotion of interests of consumers
- (b) The promotion of effective and efficient development of industry and commerce
- (c) The need to encourage improvements in productivity and efficiency
- (d) The economic policies of the Government as transmitted in writing to the Commission by the Minister.

Competition is perceived as a means to specified ends — those of promoting consumer interests and of ensuring efficient and effective development. To achieve these ends the legislation aims to stimulate competition by eliminating existing or potential restraints which adversely affect performance,³ to promote improvements in productivity and efficiency, and, where necessary, in light of the foregoing, to regulate prices.

The intent in enacting the objects was to ensure that the same broad principles are applied in making decisions on the public interest under all three major jurisdictional areas of the Act — trade practices, monopolies and mergers and prices.⁴ This principle was re-affirmed by the Commerce Commission in *Woolbrokers* and *Milk Federation* wherein it stressed the

³ The Commission has recently determined that the encouragement of competition is a primary objective and is pre-eminent in its consideration of the public interest effects of mergers under section 80(a). Collinge, "Mergers and Takeover Policy and Procedures in New Zealand" paper presented at a seminar on the Control of Mergers and Takeovers under the Commerce Act 1975, 13 September 1984, University of Canterbury; *Re An Inquiry into the Proposed Takeover by Visionhire Holdings Ltd of Sanyo Rentals Ltd* (1984) 4 NZAR 288.

⁴ Report of the Working Party (Tarrant Committee) to the Minister of Trade and Industry March 1976 pp.314.

need for consistency in pricing decisions under all parts of the Act.⁵ It is also implied in the trade practices section of the Act which specifies that the pricing criteria may be applied to determine whether the effect of a trade practice on prices, costs and profits is not unreasonable.⁶ It follows that criteria provided for determining prices in section 98 must be interpreted in light of the objects and philosophy of the Act.

The criteria are summarised as follows:

Section 98 (1) . . . the Secretary or the Commission . . . shall have due regard to;

- (a) The desirability of maintaining a stable internal price level and of achieving the maximum degree of efficiency in the manufacture, distribution, and sale of goods or services as is consistent with the achievement of the optimum rate and pattern of development of industry and commerce in New Zealand and of full employment;
- (b) Costs of production and distribution;
- (c) The profits of the manufacturer or distributor in relation to
 - (i) Shareholders' funds or the equity capital invested in the whole of the business or any particular section of it; or
 - (ii) The assets employed in, or the annual sales of, the whole of the business or any particular section of it;
- (ca) The extent to which profits in relation to the items in (c) (i) and (ii) could be limited without the financial stability and economic viability of the business (or any particular section of it) being affected.⁷
- (d) The extent of direct or indirect support by way of subsidy or otherwise from public funds;
- (e) The extent to which the manufacturer or distributor is able to demonstrate improvements in productivity or efficiency;
- (f) Conditions of competition and commercial risk;
- (g) The method of financing
- (h) Regulations made or agreements with Government;
- (i) Any other matter relevant.

Price increases are required to be justified by the applicant in terms of these criteria and the pricing authority has a discretion to allow all costs and such rate of profit as it considers justified in light of the objects of the Act. The criteria are wide in scope, encompassing both macro and microeconomic considerations. In instances they are conflicting, e.g. the desirability of both full employment and price stability. They provide only the framework for determining a justified price. Their effectiveness is dependent on the manner in which they are interpreted and applied.

(2) *The Role of Price Control Within Competition Policy*

In some jurisdictions selective price regulation and the promotion of competition are viewed as distinct and philosophically conflicting policies. In other jurisdictions they are perceived as complementary and, in some circumstances, substitute policies for enforcing efficiency and restraining price rises. The role of price regulation in a competition-oriented statute in large part depends on the objectives attributed to competition policy. The belief in western economics is that competitive market forces can allocate

⁵ *Re An Application by New Zealand Woolbrokers Association* Decision No. 44A 18 June 1980, paras 5-7 (unreported); *New Zealand Federation of Milk Stations Inc. v Secretary of Trade and Industry* (1982) 3 NZAR para.35.

⁶ Section 21(3).

⁷ Ss(ca), a test of profit limitation, was introduced by the Commerce Amendment Act 1976, replacing a test of cost absorption. The original wording taken from the Stabilisation of Prices Regulations 1974 read: "the extent to which the manufacturer or supplier . . . has the capacity to absorb any part of any increases in costs without the financial stability or viability of his business . . . being affected."

resources more effectively and cheaply than alternative forms of social control such as public ownership of industry or regulation. Competition is thus not pursued as an end in itself but as the most feasible and effective means of ensuring that resources are used efficiently in meeting consumer demands. In this context the goal of competition policy is to promote firm and market efficiency and its role is to promote competition in so far as consistent with obtaining the most efficient economic performance possible from the economy. Such a policy is also supportable on grounds of the theory of the second best.⁸

In these terms regulatory intervention is justified on grounds of market failure. A market failure exists when free competition would not result in economically efficient performance from a consumer welfare viewpoint. Price control is one means of dealing with market failure in situations where other competition policy remedies are either ineffective, not feasible or are effective only in the long term.

Within the context of competition policy selective price regulation is therefore conceived of as a corrective measure with the object of modifying and improving, from an economic welfare viewpoint, the performance of those firms which either individually or collectively possess and misuse their market power. A part of this concern is the effect of product market power on cost-push inflation and also the short term market power that inflation itself confers on some firms by generating generalised expectations of future price increases. In inflationary conditions consumers may have little idea of what prices, in general, are and may more readily accept a quoted price as the prevailing price in general. A price justification policy in these circumstances has an indirect anti-inflation effect, but this is a consequence of its primary role in an overall competition policy designed to prevent undue exploitation of market power, whether through increased product prices or cost inefficiency.

Ideally price regulation, when conceived of as a substitute for competition, should force the firm to operate at competitive levels of investment, output and profit. This is, however, an unattainable objective. Instead, a second best goal for regulatory agencies has been proposed justified on the basis of maximising economic welfare viz.,

The production of maximum output at lowest price consistent with (a) a technically efficient use of inputs, and (b) permitting the firm to earn a reasonable return to investment.⁹

Such a standard gives explicit recognition to the need to allow efficient firms to make adequate profits which, together with residual competition, provide the incentive and means to achieve efficient economic performance. It thereby acknowledges the dynamic function of profits in stimulating the investment needed to improve firm efficiency and to provide for economic growth. Yet, when appropriately applied, the standard does not result in

⁸ This theorem analytically proves that if in any sector there is a departure from perfectly competition conditions that cannot be eliminated, such as a monopoly due to scale economies, then a policy of removing other restraints on competition may lessen rather than improve economic welfare. Lipsey and Lancaster, "General Theory of the Second Best" (1956) 24 *Review of Economic Studies* 11.

⁹ Bello, "The Firm, Investment, Rate of Return and the Monopolies Commission" (1977) 4 *Journal of Business Finance and Accounting* 242; Leland "Regulation of Natural Monopolies and the Fair Rate of Return" (1974) 5 *Bell Journal of Economic and Management Science* 8.

consumers paying more than the minimum necessary to induce the supply of goods demanded by them. It nevertheless requires that economically appropriate methods of profitability assessment be applied in determining prices. The pricing decisions of the Commerce Commission, to date, indicate that there is a lack of a consistent theoretical framework to guide profitability assessment and as a result an ambivalence about the appropriate role of Positive List price policy within the Commerce Act. The following section therefore evaluates the manner in which the profitability criterion in section 98 has been interpreted and applied. This leads to conclusions and recommendations concerning the methods of profitability assessment and form of price policy most consistent with competition policy as expressed in the Commerce Act.

IV THE PROFITABILITY CRITERION – INTERPRETATION AND APPLICATION

In discussing the application of the profitability criterion the method and approach towards price determination will be first outlined. This will provide the basis for an evaluation of the profit rates applied, the valuation basis adopted, and the method used to determine the reasonableness of the profit rate, leading finally to comment on the appropriateness of price policy as administered under the Commerce Act.

(1) Methodology and Cost Assessment

In determining price, costs and revenues at the date of application are annualised and then tested against the allowed profit rate to ascertain if profit limitation or cost absorption is warranted. Price is set to yield revenues, ex-ante, just sufficient to cover annualised costs and the allowed profit based on an estimated annual output level. The allowed profit is calculated by applying the allowed profit rate to opening shareholders' funds although on occasion a total asset base or more infrequently, where the assets of a part of a business cannot be readily identified, the return on sales has been used. If the realized profit rate differs from the ex-ante allowed profit rate no repayment or, conversely, compensation is made. Industry-wide price setting is based on the costs and revenues for the whole industry where one or a very few firms are involved or on those of a representative panel of firms. The resultant average price would be more profitable to the more efficient firm but not as low as that based on the cost structures of the most efficient producers.

The object of these procedures is to constrain the firm from using its market power to earn excess profits (ex-ante) at the expense of the consumer whilst (a) retaining for the public the benefits of large scale production and (b) permitting the firm to earn a reasonable profit rate such that it can maintain its financial stability and economic viability. The regulatory approach can, in principle, be represented as follows:

$$\text{Required revenue} = O + I + keE \quad (1)$$

$$\frac{\text{Required revenue}}{\text{Annual output in units}} \\ = \text{price per unit}$$

where O = allowable operating costs (annualised)

I = interest on debt capital (annualised)

E = shareholders' funds

ke = allowed before tax return on shareholders' funds

Equation (1) indicates that three variables have to be determined — operating costs, interest, the allowed profit rate on shareholders' funds. The concern here is primarily with the latter variable which forms the subject of section 98 (1) (c) and (ca).

The Commission, in *Brewers Association*, outlined the scheme of control under these subsections.¹⁰ It found that paragraph (c) must be considered first and independently of (ca) to establish the appropriate method of testing profitability and the quantum of profits earned. It next fell to determine as a completely separate exercise under (ca) the extent to which profits as established in (c) could be limited without the financial stability and economic viability of the business being affected.

In determining the basis on which profits should be limited the Commission, in effect, adopted a comparable earnings test. It believed that fair comparisons of the returns on shareholders' funds could be made only with the results of other companies, although it recognised that such comparisons have their weaknesses. It further found that comparisons should be on a before tax basis to avoid the distorting effect of tax based export incentives, and that if the Secretary, as pricing authority of first instance, had made a decision which was reasonable in the circumstances, done in good faith and was decided fairly and not capriciously, the Commission believed it should not intervene to alter the decision either as to the particular profit rate chosen or as to its appropriate magnitude. This was justified as being in accord with Halsbury's *Laws of England*, Vol. 1 'Administrative Law', where the relevant considerations under which a superior body will not intervene in the decision of an inferior body were stated.

In ascertaining profits all relevant production and distribution costs are to be taken into consideration.¹¹ In determining such costs the Secretary has applied the following principles. Costs must be actually incurred,¹² are not to anticipate future cost increases;¹³ depreciation is not to exceed the rates allowed by the Inland Revenue Department but such rates are not always accepted if too distorting;¹⁴ appeal costs, delay costs and profit restoration for the period from date of application to the date the price increase is granted are not allowable;¹⁵ in general the principles laid down by the Inland Revenue Department are followed in determining cost allowability;¹⁶ the incurrence of a cost does not necessarily mean that it will be automatically passed through into price,¹⁷ but "in general if a company has incurred a cost, we believe it would not have done it if it could have been avoided, and in general we accepted the costs as claimed."¹⁸ Wage and other cost increases well out of line with those claimed previously

¹⁰ *Brewers Association of N.Z. (Inc.) v Secretary of Trade and Industry* Decision No. 54A, 6 November 1981 (unreported) paras. 61–72.

¹¹ *ibid*

¹² *Brewers Association of N.Z. v Secretary of Trade and Industry* (1976) 1 NZAR 450

¹³ An exception was in *N.Z. Window Glass* (Decision No. 61) where a provision operating through a pool account for the cost of repairing vats was allowed due to the technological nature of the industry.

¹⁴ *Brewers Association*, Decision No. 54A, *op. cit.* transcript 130.

¹⁵ *ibid* 128

¹⁶ *ibid* 30

¹⁷ *Brewers Association*, Decision No. 54A, *op. cit.* para. 45.

¹⁸ *Brewers Association* (1976) *op. cit.* transcript F22

may however be queried;¹⁹ product quality is not investigated, the company's word being accepted as to its maintenance.²⁰

The Secretary's attitude towards the investigation of cost efficiency may be indicated by the following statements from appeal transcripts. The Department applies no criteria as to necessary or legitimately incurred costs if there is no reason to question their existence;²¹ the Department does not see it as its function to examine the efficiency of firms²² "unless we were to presume that we could run the company's business more efficiently than they can it would be idle for us to question the basis of their operation";²³ "we don't ask ourselves what this company's costs would be if organised in a different manner";²⁴ "the Department's general approach is concerned with costs which have in fact been incurred . . . and is not further concerned whether a few dollars here or even a few thousand dollars there were necessarily incurred"; under section 98 no obligation is placed on the Department to check the efficiency of companies;²⁵ the onus is on the company to demonstrate productivity gains and it is not the practice of the Department to ask the company if its productivity or efficiency increased.²⁶

In application the allowable cost and profitability criteria have dominated the other section 98 criteria which, if referred to at all, have only been cursorily argued. Proceedings have essentially amounted to a cost justification plus allowable profit rate process with little cognizance of how price policy and profitability may contribute to resource allocation, investment needs and efficiency and thereby to the objects of the Act. The pricing criteria offer the potential for the development of a price policy consistent with the two prime economic performance and consumer interest objectives of the Act. But their effectiveness depend on how they are interpreted and applied. The following statements illustrate the approach taken towards price policy by the Department of Trade and Industry.

In an early appeal, *Bakers' Association*, the then Departmental representative stated that "the principal aim of having prices under control is to stabilise prices . . . that is the first thing we have to have regard to. It is price control . . ." and that "the fundamental tenet of any system of price control is that it be applied consistently and equitably to all enterprises."²⁷ Likewise in *Akrad*, the "activities disclosed a substantial rate of return on investment which in the department's view was wholly inconsistent with Category A price control."²⁸ In 1981 the Departmental

¹⁹ *idem* Examples given were a trip to the Olympic Games; an increase in advertising from \$0.5 million to \$2m.

²⁰ *idem*

²¹ *idem*

²² *ibid* F23

²³ *idem*

²⁴ *ibid* H2

²⁵ *ibid* F 23

²⁶ *Brewers Association*, Decision No. 54A, *op. cit.* transcript 148

²⁷ *New Zealand Association of Bakers (Inc) v Secretary of Trade and Industry* (1976) 1 NZAR transcript D13, B3.

²⁸ *Akrad Radio Corporation Ltd v Secretary of Trade and Industry* (1977) 1 NZAR Statement of Evidence by Departmental Executive Officer, J. P. McDermott, para 23.

representative was of the view that the passing of the Commerce Act and the advent of section 98 had not notably changed anything in the administration of price control from either the 1974 or 1973 Stabilisation of Prices Regulations, which in application were dominated by the control per se philosophy and the allowable cost and cost absorption tests. Yet he also acknowledged that "price control is a part of the Commerce Act and the Commerce Act itself is directed to facilitating competition."²⁹ This indeterminacy as to the role of price policy in a competition statute and the manner in which it should be administered is also evidenced in the profitability measures applied for price determination purposes.

(2) *The Appropriate Profit Rate*

(a) *The approach adopted*

The profitability criterion has been central to the determination of a justified price and the subject of much contention. Dispute has centred on the appropriate profit rate to apply and its method of measurement, the definition of the components to be included in the profit rate and the method of determining its reasonableness in accordance with section 98 (1) (c). The Commerce Act makes it mandatory to use certain accounting rates of return to establish the reasonableness of profits and hence justified prices. Yet it provides no guidance as to which profit rate(s) is the most appropriate to use for this purpose or why these three particular profit rates were chosen and not others, such as the rate of return on capital employed or a discounted cash flow rate of return.³⁰

The issue of the appropriate profit rate to use to determine price was argued in *Brewers Association* (1981).³¹ The Association contended for the profit/sales ratio, the Secretary counter-argued that the rate of return on shareholders' funds was the more appropriate measure of profitability. The Commission, referring to the wording of section 98 (1) (c) found that since the three bases were separated by the word "or" it had no difficulty in deciding that they comprise three alternatives and that only one can be selected. There was further nothing in the Act to suggest that any one was preferable or to be used in any particular circumstances. The Commission held that the three alternatives were of equal weight, none was dominant, or to be preferred and the choice should be the one which is appropriate in the circumstances. The rate of return on shareholders' funds had been applied consistently and impartially by the Secretary and the Commission did not propose to interfere with the Secretary's pricing discretion in selecting the profit rate on shareholders' funds.

The Brewers Association submitted that the test adopted must be that which "is the more appropriate to the corporate form or organisation of the industry producing the goods."³² In the case of the brewing industry, a conglomerate, this was claimed to be the profit/sales ratio. Its use, it was argued, would eliminate problems arising from sectorisation, asset valuation, tax and volume changes. Its appropriate magnitude was deemed

²⁹ *Brewers Association* Decision No. 54A *op. cit.* para 55, transcript 91.

³⁰ Capital (funds) employed is defined as equity capital plus all interest bearing debt, whether long or short term. It differs from total assets in that it excludes all non-interest bearing debt such as trade creditors, taxes payable and accrued expenses.

³¹ Decision No. 54A *op. cit.* para. 61.

³² *ibid* para. 28

to be 12.2%, this being derived as an arithmetic by-product of the Commission's 1976 decision to allow a rate of return on shareholders' funds of 21%.³³

The Secretary responded by arguing that price control was not for corporate convenience and in accordance with authoritative legal texts his statutory pricing discretion in selecting the rate of return on shareholders' funds, if exercised in good faith, should not be interfered with. He contended that commercial convenience was relevant together with the objects and Long Title of the Act, but there was no preferred test. The profit/shareholders' funds ratio had been traditionally applied and there was merit in its consistent application. Other measures were used infrequently and then only where exceptional circumstances existed. The total asset base was used where shareholders' funds were not readily ascertainable and, in cases, where the proprietary ratio differed from normal.³⁴ The sales base was applied where it was impracticable to segregate a small segment of the business or where entrepreneurship was important as in a shareholder/employee situation.³⁵

(b) *Evaluation*

The foregoing arguments and their determination is, in general, representative of the approach taken towards pricing decisions. The question which fell for determination was the appropriate measure of profitability for the purpose of justifying prices. This is fundamentally an economic and accounting determination and not a legal one as construed by the Commission. What is relevant to the determination is firstly, the objects of price control within the Commerce Act, viz., to improve economic performance in accordance with second best regulatory objectives in situations where market power is exploited³⁶ and secondly, having established the purpose to ascertain the concept of profitability most consistent with that purpose.

The questions of competition and market power and the nexus between prices, profitability, investment and economic performance are economic issues and as such require to be evaluated by soundly reasoned economic principles. This was not done by the Commission. Instead, a legalistic approach was adopted, and even if this approach is accepted the Commission's evaluation is problematical. The fact that the profit rates specified in section 98 are separated by the word "or" means that they are alternatives, but it does not necessarily follow that they are mutually exclusive alternatives as interpreted by the Commission.³⁷ Each of the specified profit rates indicates a different aspect of profitability and, accordingly, each has its specific and more appropriate circumstances of

³³ The Association apparently overlooked the circularity of this standard. Prices previously set by the Commission are a determinant of the profit/sales ratio. Hence it is circular to use that ratio to determine price.

³⁴ *Brewers Association* Decision No. 54A transcript 93.

³⁵ *ibid* 94, 160.

³⁶ *ante*, p.8.

³⁷ An analogy may be drawn with the Commission's construction of the section 21 (1) trade practices criteria which are also separated by "or". In *Re An Application by New Zealand Stock and Station Agents* the Commission found that the criteria were alternatives but that all should be employed. (1979) 1 NZAR 532 at 541.

use. In evaluating as distinct from measuring profitability one ratio cannot be considered in isolation from the other. For instance, the profit rate on sales is a component of the profit rate on capital and as such its interpretation requires both to be considered together.

The use of the rate of return on shareholders' funds was justified on grounds of consistency and traditional usage. But these grounds are insufficient as criteria. A ratio may be traditionally and consistently wrongly applied, particularly when the case for the use of the rate of return on shareholders' funds has never been fully argued either by the Commission or prior pricing bodies. The use of this ratio means that price decisions are distorted, *inter alia*, by the form of capitalisation adopted. A measure of profitability that is independent of taxation effects and financial leverage induced variations in profitability is required. The Department has recognised the distortion imposed by differing degrees of financial leverage but rather than taking this as an indicator of the ratio's unsuitability has instead employed the notion of a "normal" equity capital/total asset³⁸ ratio, this being the average for a public company, a figure of 50% being determined in *Golden Bay*³⁹ and a standard of 60% being later mentioned in *New Zealand Window Glass*.⁴⁰ Where the company's proprietary ratio deviated from "normal" what the rate of return on shareholders' funds would have been if its proprietary ratio was normal was taken into consideration.⁴¹ This, however, is not an appropriate solution.

The proportion of debt and equity capital employed is a function of factors such as the technological characteristics of the industry, a company's asset structure, business risk and market valuation. Unless two companies have identical assets there is no theoretical reason for their capital structure proportions to be the same. There is no such thing as an average equity/total asset ratio that all companies should have in a normative sense. The optimal proportions of debt and equity employed will be those which minimise the company's weighted average cost of capital.⁴² If in computing the allowed rate of return the proportion of equity finance is constrained to an economically meaningless average the company may be unable to attract the capital needed to optimally finance operations. The Department's procedure and its acceptance by the Commission is at variance with established precepts of finance theory.

The Secretary and Commission are nevertheless constrained by the wording of section 98 to use the profit rates specified in this section for ascertaining the reasonableness of the profit rate and for determining prices. It is submitted that the three ratios specified are substantially inappropriate for these purposes. They differ from those applied for similar purposes by comparable pricing and competition bodies overseas. Of the three ratios required to be used by the Commerce Act none are or were used by the

³⁸ *Brewers Association Decision No. 54A op. cit.* transcript 93. This ratio is alternatively referred to as the proprietary ratio.

³⁹ *Golden Bay Cement Co. Ltd. v Secretary of Trade and Industry* (1976) 1 NZAR 15.

⁴⁰ *New Zealand Window Glass Ltd. v Secretary of Trade and Industry* (1982) 3 NZAR 76 at 79.

⁴¹ *Golden Bay op. cit.* 19.

⁴² This holds under either the traditional theory of cost of capital/firm valuation or the Modigliani and Miller theory incorporating tax saving effects of financial leverage and bankruptcy costs. See Van Horne, *Financial Management and Policy* (5th ed. 1980) Ch.9.

United Kingdom Monopolies and Mergers Commission, the 1965–1970 National Board for Prices and Incomes (UK), the 1977–1979 Price Commission (UK) or the Australian Prices Justification Tribunal (1973–1981) as their major indicator of profitability. In general, these bodies have relied upon the accounting rate of return on capital (funds) employed and, in cases, on a discounted cash flow (DCF) rate of return. The return on sales and equity capital have been used but as subsidiary measures designed to explain movements in the foregoing primary and more comprehensive measures of profitability.

The economically most appropriate method for determining price for those firms that possess market power is the DCF/cost of capital test. But where this method cannot be used the accounting rate of return on capital employed/cost of capital test is the method most appropriate for determining price in a system of price regulation based on efficiency and resource allocation principles.⁴³ The profit test in section 98 (1) (c) does not provide for either of these tests although they could be introduced under section 98 (1) (i) (*viz.*, any other matter thought relevant) or, arguably, under section 98 (1) (g) — the method of financing the manufacture, supply or distribution of the goods or services. However, these tests have never been advanced or considered in proceedings by any pricing applicants, the Secretary or Commission, or others granted party status.

The rate of return on shareholders' funds, the ratio most frequently relied upon by the Secretary, is conceptually inappropriate for determining the allowed rate of return on capital and thus for setting prices. A function of the allowed profit rate is to permit the viability of operations whilst precluding the possibility of abnormally high returns from market power. Viability depends on whether profits earned from the total invested capital exceed all costs of employing that capital. The allowed profit rate, being payment for the supply of capital, must accordingly be sufficient for the firm to retain its existing capital and to attract the new capital needed to replace or add to its assets. This allowed rate of return is the firm's opportunity cost of capital and the latter is correctly measured as a composite of the required return to all sources of capital and not to one particular source.⁴⁴ It is economically incorrect to term part of the required return to capital a past incurred allowable cost (interest) and to provide for the other component (the return to shareholders) in the allowed profit rate. The rate of return on equity capital is also (a) insufficient as an explanation of and as a guide to the allocation of new investment; (b) ignores the interdependencies both as to risk and return that exist between debt and equity capital; (c) is more sensitive to measurement error than the profit/capital employed ratio; (d) varies with differences in the proportion of debt and equity capital used to finance assets. The ratio would indicate that two firms using identical assets to generate the same amount of profit were of differing profitability if they employed different degrees of financial

⁴³ These conclusions were reached in a thesis entitled "Profitability Assessment in New Zealand Price and Trade Regulation by C.E. Cliffe, University of Canterbury 1982. In this thesis the economic basis of alternative profitability measures and their suitability for evidencing the exercise of market power, for identifying an adequate or reasonable profit rate and for determining whether prices or price increases are justified in economic terms were examined.

⁴⁴ Officer, "The Measurement a Firm's Cost of Capital" (1981) 21 *Accounting and Finance* 32.

leverage. From society's viewpoint the investment worth or profitability of a particular unit of operations is indicated by the rate of return on the total invested capital rather than on one particular source of capital. The profit/equity capital ratio is a measure of profitability that has relevance from the shareholders' point of view. But where private and social costs and benefits differ gains to shareholders are not coincident with the interests of the public in efficient resource allocation and use. For these reasons the return on shareholders' funds is an inappropriate basis upon which to determine the allowed profit rate and thus to set prices.

It may be argued that the ratio has relevance as a guide to the equity of income distribution — high profit rates indicating that income may be channelled from consumers to shareholders and conversely for low profit rates. But whether these matters should be the concern of a prices and competition policy is highly debatable. In accepting the existence of firms with appreciable market power, price policy attempts to control their behaviour so as to more closely approximate the performance results of an effectively competitive market. It would seem that matters of income distribution are best confined to this context.

Deliberate attempts to influence income distribution involve social value judgments and interpersonal comparisons of utility which extend beyond the bounds of economics and the theory of competitive markets. It is submitted that remedial measures in this area are better effected by other policy instruments where there is a more publicly obvious mandate, responsibility and accountability by the decision making authority. It follows that the return on shareholders' funds must be a subsidiary indicator of profitability in a price justification policy, used to evidence the effect of pricing decisions on shareholder returns in so far as the magnitude of the ratio may influence the supply of equity capital to the firm.

The rate of return on sales is similarly a conceptually inappropriate basis upon which to determine price in the context of a price justification policy. In such a policy the aim is to supervise the private price fixing activities of those firms with sufficient market power to unilaterally determine market price and, where necessary, to substitute public price fixing. To achieve second best regulatory objectives the rate of return appropriate for setting prices must be a rate of return on capital. The profit rate on sales is a component of the return on invested capital, measuring only one aspect of profit performance. Since it does not cover all determinants of profitability it is inappropriate as a guide to the reasonableness of profits and thus to firm viability. It cannot therefore provide an economic justification for proposed price increases. Its main use in price determination is as part of the overall profit evaluation of firm performance to ascertain the reasons why the return on capital has moved in a certain direction and, where capital intensity is constant, such as in intrafirm analysis over time, to determine whether prices are closely related to the costs of supplying consumers.

The relationship between the rates of return on sales and capital and the deficiencies in using the profit/sales ratio in price determination have been expressed, respectively, by three pricing bodies as follows⁴⁵

⁴⁵ National Board for Prices and Incomes *Report on Synthetic Organic Dyestuffs and Organic Pigment Prices* (1969; Cmnd. 3895), para. 42; Prices Justification Tribunal, *W.D. & H.O. Wills (Australia) Ltd. Matter N74/1891*, 29 August 1974; Price Commission (U.K.) 1977-1979 *Cadbury Schweppes Foods Ltd — Grocery Products* (1978; HC 293), 24.

A movement of costs is not in itself, however, sufficient to justify an increase in prices: what matters is the movement in costs in relation to the profit margin and the profit margin in relation to investment requirements.

The companies attempted to establish that the relevant ratio for comparison of profitability was of operating profit to sales . . . The counsel assisting the Tribunal however reminded the Tribunal that profit was a reward to the company for investing in assets and so the relevant measure of profitability must be related somehow to the capital of the company concerned and not to sales . . . We accept the argument that in this case profit should be related to capital rather than to any sales figure.

A consideration of the percentage margin on sales in such an industry may be misleading in that it ignores the rate at which the company is turning over its capital. Consequently we have examined the relative rates of return on capital employed.

Finally the third profit rate specified in section 98 (1) (c), the profit/total asset ratio, can be shown to be deficient for price determination purposes since the total asset base is definitionally inconsistent with definition of profits servicing that base.

The conclusion must therefore be that the profitability measures expressed in section 98 and relied upon by the Secretary and Commission are ill-suited to their purpose — viz., to determine price in a system of price control based on efficiency and resource allocation objects.

(3) *The Valuation Method*

This section outlines the debate over the method applied to measure the profit rate in order to illustrate the policy approach adopted. The question of which particular measurement method is most appropriate for price justification purposes will not be discussed within the confines of this article. The concern is to identify the manner in which policy has been applied, the considerations entering into pricing decisions, and to examine the adequacy of the statutory provisions for taking into account changes in specific and general prices. The discussion will be conducted primarily in terms of the rate of return on shareholders' funds since this has been the profit rate in contention, but the arguments are general.

(a) *Components of the profit rate*

First, however, the components of the rate of return on shareholders' funds will be defined. In *Bakers Association* the Commission stated that "the phrase shareholders' funds covers an accounting concept and can be defined as the balance remaining in an incorporated company's accounts after deducting external liabilities from total assets".⁴⁶ This description leaves unspecified the components which are to be included as assets and liabilities and the method of ascertaining their quantum. The Secretary invariably adjusts shareholders' funds to the level regarded as being effectively used in the normal trading activities of the business. Shareholders' funds are normally reduced to eliminate (a) asset revaluations, usually land and buildings. Assets are stated at their cost at the time of purchase by the applicant, less depreciation since that date; (b) goodwill other than that purchased by the applicant; (c) book value of assets not considered to form part of normal trading activities, e.g. outside investments; (d) shareholders' funds relating to export trade. Corresponding adjustments to profits include the elimination of the income (or loss) relating to assets excluded, to exports and depreciation written off above the rates allowed

⁴⁶ *Bakers Association op. cit.* para.11.

by the Inland Revenue Department for the year ended 31 March 1975.⁴⁷

To the extent that purchased goodwill capitalises the advantages of a monopolistic position such as in a licensed or protected industry or capitalises the benefits of increased market dominance through takeover activity, then it is inappropriate to include purchased goodwill in the base upon which a return is to be allowed.

(b) Inflation accounting — the initial decision

The question of inflation accounting was first considered on appeal in *Bakers Association* in which the appellant objected to the elimination of revalued land and buildings from shareholders' funds. The appellant submitted that asset revaluations form a legitimate part of shareholders' funds being accepted by the accountancy profession, the taxation authority, lending institutions and auditors. On economic grounds it was argued that the need to maintain real capital intact necessitated a revaluation of assets to replacement cost.

The Secretary, on the other hand, maintained (a) that asset revaluations represent a departure from historic cost accounting. Any such change for pricing purposes was a major policy decision which should be made on a comprehensive and consistent basis after taking into account its effect on resource allocation and economic stability; (b) that the use of accounts containing inconsistent and partial asset revaluations was no advance over the use of accounts based exclusively on historic cost; (c) that the legislature in re-enacting section 98 (1) (c) in words very similar to the repealed Regulation 31 (b) of the Stabilisation of Prices Regulations 1974 created a presumption of no change intended in the law. This was in accord with the principle of statutory construction enunciated in *D'Emden v Pender*;⁴⁸ (d) that due regard must be paid to the long and consistent practice of the Price Tribunal and Department in stating assets at historic cost.

In determining the issue the Commission found that the matter was "essentially one of statutory interpretation, particularly of the phrase shareholders' funds".⁴⁹ Accordingly, the appellant's submission that shareholders' funds be measured by concepts applied by economists and accountants was seen to involve a principle of statutory interpretation relating to the use of technical language in the construction of a statute. Since more than one technical meaning was possible the Commission found this approach of little assistance.⁵⁰ The Commission also rejected the Secretary's third argument on the grounds that there were no authoritative judicial decisions or long established course of practice under the 1974 Regulations (which had been in operation for only 15 months) sufficient to create the presumption and it was questionable whether a statute could be interpreted by reference to a regulation, particularly when that regulation was under issued under a different statute (the Economic Stabilisation Act 1948) rather than the Control of Prices Act 1947. Instead, the Commission placed weight on the long practice of the Price Tribunal and Department in excluding revaluations and on the manner in which the 1974 Regulations

⁴⁷ Department of Trade and Industry. A Guide to the Stabilisation of Prices Regulations 1976, paras.108-110. Procedures have remained unchanged under the Commerce Act.

⁴⁸ (1904) 1 LLR 91 at 110.

⁴⁹ *Bakers Association op. cit.* para.10

⁵⁰ *ibid* para.16.

had been interpreted and administered. It assumed that this practice was known to the legislature when enacting section 98 (1) (c) and the Commission found it difficult to infer that the legislature, in re-enacting equivalent words, intended these words to be construed as having a different meaning from that previously applied.

The Commission thereupon held that shareholders' funds should be measured on the basis of the pure historic cost accounting concept. Yet the Commission also expressed the opinion that the appellant's evidence had greater economic substance than that of the Secretary and that a start should be made, where legal and practicable, on changes in pricing policy to preserve real capital, provide for economic growth and to facilitate the best allocation of scarce resources. The Commission was convinced that changes must occur and soon. This was believed to be in the interests of both industry and consumers. However, the time was deemed inopportune to initiate such changes (inflation accounting being the subject of current Government study), and caution was needed in light of the need to promote price stability.⁵¹ In view of these comments it is instructive to examine subsequent developments in the use of measurement systems other than historic cost for pricing purposes.

(c) *Subsequent developments*

Following the Tarrant Committee review of the Act the Commerce Amendment Act 1976 introduced the following subsection:

S.98 (2) "Where, in relation to any appraisal of the costs of production and distribution or profits, the manufacturer or distributor of the goods or the supplier of the services demonstrates special grounds calling for consideration of the cost of replacement of current or fixed assets, the Secretary or Commission in determining prices may have regard to any such cost, if satisfied, that such a course is necessary in order to preserve the financial stability and economic viability of that person's business or any particular section of it."

Although section 98 (2) provides for the use of replacement cost valuations the test for their admissibility has been stringently construed. In *Akrad*,⁵² the first and to date the only case in which section 98 (2) has been raised on appeal, the Commission indicated that applicants need to first demonstrate "special grounds" calling for the consideration of replacement costs and, in addition, their use must be necessary to preserve the financial stability and economic viability of the business. In the case in question the Commission was not persuaded that the production cycle of the colour T.V. industry constituted special grounds nor did it find that the evidence indicated that the appellant's economic viability and financial stability was or was likely to come into jeopardy.

In the more recent *Brewers Association* case (1981) the Commission took the opportunity to re-affirm its prior decision by stating,⁵³ "Until such time as there is universal acceptance of inflation accounting the Commission believes it should use shareholders' funds calculated on an historic cost basis", and in the *L. D. Nathan Ltd. — McKenzies Ltd.* takeover inquiry

⁵¹ *ibid* paras.35-39.

⁵² *op. cit.* paras. 23.1 – 23.10.

⁵³ *Brewers Association* Decision No. 54A *op. cit.* para.63.

the Commission found that due to⁵⁴ “the lack of ageement on a universally acceptable method of accounting for inflation, it is unable to prescribe any basis for the calculation of an effective rate of return other than the traditional relationship between profit-before-tax to shareholders’ funds”.

In the six years since the inception of section 98 (2), its use has not been seriously argued on appeal before the Commission.⁵⁵ Instead, applicants have confined their submissions to section 98 (1) (c), arguing either that bases of valuation other than historic cost are admissable under this sub-section or, alternatively, that if historic cost valuation is applied then an increase in the allowed profit rate on the historic cost base should be granted. The substance of the former arguments is outlined below followed by their evaluation. This incorporates a discussion of the relationship between section 98 (1) (c) and section 98 (2) and an evaluation of the Commission’s acceptance of inflation accounting.

In *Milk Federation*⁵⁶ a major issue was whether land and buildings could be valued at the higher of cost or Government valuation in determining, under section 98 (1) (c), the assets employed in the business. The Federation submitted, inter alia, that section 98 (2) was irrelevant in this case since it did not seek for its assets to be valued at replacement cost as provided for under that sub-section. The Federation also pointed out that the Commission itself, in approving a price increase under a collective pricing agreement, had previously accepted assets at the higher of cost or Government valuation.⁵⁷

In response, the Secretary maintained that historic cost valuation was in accordance with the provisions of section 98 (1) and that no special grounds had been demonstrated to justify the use of the alternative basis as provided for in section 98 (2). He submitted that section 98 (1) (c) should not be construed to cover the higher of cost or Government valuation and was of the view that if no special case was made that it was necessary to preserve the financial stability and economic viability of a business under section 98 (2), then the Secretary was bound to adopt historic cost under section 98 (1) (c). The use of historic cost was further supported by a long line of past decisions and the adoption of any other basis would cause a break in pricing precedent and may cause inequity.

In determining the issue the Commission looked to the Act for a definition of the word “assets” but finding none came to the conclusion that it could “only rely on what it has, in the past, accepted as the interpretation of the words used in the Act and as enunciated in its previous decisions”.⁵⁸ The Commission noted its own consistent belief that the appropriate calculation of “shareholders’ funds was on an historic cost basis and reasoned that this same principle should apply equally to “assets employed”. The Secretary had been consistent and not discriminatory or capricious in dealing with the matter. The Commission could therefore find no just reason or special circumstances to direct him to change his principle — viz., that

⁵⁴ *Re An Inquiry into the Proposed Takeover by L. D. Nathan & Co.Ltd. of McKenzies (N.Z.) Ltd.* (1981) 2 NZAR para.203

⁵⁵ *New Zealand Federation of Milk Stations Inc. op. cit.* transcript 130

⁵⁶ *ibid* 65

⁵⁷ *Re An Application by New Zealand Woolbrokers’ Association* Decision No. 44A *op. cit.* para.8

⁵⁸ *Milk Federation op. cit.* para.45

he was bound to adopt historic costs unless section 98 (2) was invoked by the applicant.⁵⁹

Evidence given in the course of appeal hearings further elucidates the manner in which section 98 (2) has been construed by the Secretary. The Departmental representative was of the opinion that although section 98 (2) refers specifically and only to replacement costs, the intent was that it should be construed as referring to any method of valuation other than historic cost. He explained that at the time the subsection was enacted inflation accounting was the subject of much professional discussion and the terms current cost and replacement cost were (in his view) being used synonymously. He considered the thrust of section 98 (1) related to historic costs and if something more than historic cost was required, a special case had to be made under section 98 (2). The one case in which section 98 (2) had been applied related to certain small flourmills with assets approximately 100 years old. It was demonstrated that viability was likely to be at risk if the authorised profit rate (15%) was applied to the historic cost base. Assets were therefore valued at the higher of cost or latest Government valuation. The authorised profit rate norm for all industries (15%) was, however, reduced to 12.5%.⁶⁰ The flourmillers were described as being on their “economic knees”. The Department considered it a slight overstatement to say section 98 (2) was used “as a sort of rescue section”, but nevertheless submitted that the phrase “to preserve financial stability and economic viability” in section 98 (2) imposed a more severe profit test than the phrase “without affecting financial stability and economic viability” in section 98 (1) (ca). It was appropriate to apply section 98 (2) where the firm’s rate of return indicated it was about “to go to the wall”.⁶¹

(d) Evaluation

The Commission’s determination in *Bakers Association* and subsequent cases will be first discussed, followed by comment on the construction and adequacy of the statutory provisions for taking into account changing prices. Finally, the relationship between historic cost and current value accounting bases for price determination will be explicated.

The Commission’s approach to the revaluation issue in *Bakers Association* was essentially a legalistic one, seeing the issue as one of the statutory interpretation of “shareholders’ funds”. After rejecting a number of arguments on either side it placed weight on past practice carried out under a different statutory authority under different economic conditions. The Stabilisation of Prices Regulations issued under the Economic Stabilisation Act 1948 were intended to be of a temporary nature, being concerned with particular price stabilisation problems of the moment. The advent of the Commerce Act repealed prior pricing legislation relating to Category A goods and services. It placed price policy within the context of an Act directed towards improving economic performance and protecting consumer

⁵⁹ *ibid* para.47.

⁶⁰ *Milk Federation op. cit.* transcripts 92, 129, 130, 138, 173.

⁶¹ *Brewers Association*. Decision No 54A *op. cit.* transcripts 100, 162. The hypothetical example given indicated that economic viability and financial stability was likely to be affected if the firm’s profit rate fell below 15%, but if it fell to 10% the firm would be likely to go to the wall and thus application of section 98 (2) was warranted.

interests through competition or, where this means was not feasible, by regulating prices. It may be argued that if legislation is changed then it is changed for a purpose and that purpose is to be ascertained by reference to the intent, objects and scheme of the Act in which the particular pricing legislation is embedded. The presumption of no change with the past as adhered to by the Commission was thus not inevitable and could have very easily have gone the other way. But the Commission lacked the strength of its convictions as to the economic desirability of a change in the direction of price policy and elected conformance with the past. However, past practice sanctioned by tradition and consistent usage and carried out under different statutory authority is an unsuitable basis for what is essentially an economic determination to be made under present market conditions and in line with the intent and spirit of the present Act. This is particularly so when the case for historic cost measurement in price control proceedings had never been fully argued in the past or, indeed, even to date. Its continued adoption by the Commission without validation represents circular reasoning.

Subsequent decisions have entrenched the initial view. In *Brewers Association* (1981) the Departmental representative acknowledged that the Commission's expression of the desirability for future changes in price policy had little impact in practice and that policy had not notably changed from that under the Stabilisation of Prices Regulations 1973 and 1974.⁶² The justification for subsequent decisions has rested on the initial determination in *Bakers Association* which itself was without established validity. The Commission has therefore been unable to elucidate, in economic terms, the reasons behind its subsequent decisions. In *Brewers Association* the conclusion was reached that⁶³ "even with these difficulties, historic shareholders funds seems to be the appropriate base" without explanation of why it was so or of the factors entering into the decision. In summary, the legalistic approach adopted by the Commission is unsuited for the effective administration of price policy which must be responsive to changing economic conditions. Decisions reasoned in terms of economic and accounting principles are required and their application made in cognizance of the objects and intent of the Commerce Act.

The standard of universal acceptance imposed for the use of inflation accounting in *Brewers Association* and *L. D. Nathan — McKenzies* is unrealistically high⁶⁴ and, indeed, beyond the standards of evidence specified by the Chief Justice in *HANZ*.⁶⁵ Universal acceptance of any particular method of inflation accounting is simply unattainable. It would require all to be known and one agreed-upon purpose of measurement and method of income determination and capital maintenance such as to leave no room for dispute. Historic cost principles themselves are not universally accepted as witnessed by the use of inflation accounting. The Commission's determination, if followed, would mean that any one person giving evidence

⁶² *Brewers Association* Decision No 54A, para.55, transcripts p.25.

⁶³ *ibid* para.63. The difficulties refer to the use of revaluation reserves as a source for bonus issue shares, thereby preventing their identification and elimination as revaluations from shareholders' funds.

⁶⁴ ante, p.22.

⁶⁵ *Hotel Association of New Zealand v Examiner of Commercial Practices* Unreported judgment (High Court, Wellington, M326/78, 4 March 1980, Davison C.J.) at 14.

of his disagreement with the particular method adopted would preclude the adoption of inflation accounting.⁶⁶ The debate over inflation accounting methods has not prevented comparable overseas pricing bodies from using the information it has to provide to guide decisions. The statement in *L. D. Nathan and McKenzies* that in absence of universal acceptance of inflation accounting the Commission is unable to prescribe any basis for the calculation of an effective rate of return other than the traditional profit to shareholders' funds relationship⁶⁷ is untenable and an instance of circumscribed reasoning. It excludes the use of any other rate of return measure such as discounted cash flow or a holding period rate of return, and places price policy in a straight-jacket.

In its construction of section 98 (1) (c) the Commission has confused the concept of shareholders' funds (and assets) with that of its measurement. The sub-section merely specifies the particular concept of capital that is to form the ratio base. The valuation or measurement rule applied to that concept to ascertain its magnitude is something different from that which is to be measured. Hence, on the strict wording of section 98 (1) (c) any measurement rule may fall for consideration under the sub-section and that selected must be the method economically most appropriate for the purpose in hand. It may also be argued that since section 98 (2) was added by way of the 1976 amending Act it cannot affect the interpretation of the pre-existing section 98 (1). The converse argument is that the legislature in enacting section 98 (2) was aware of the historic cost interpretation accorded to section 98 (1) and the intent was to specifically make provision for replacement cost valuations under section 98 (2). But again the wording of section 98 (2) is not exclusive. Replacement cost valuations may be employed under section 98 (2) but that does not necessarily preclude the use of alternative bases of valuation under section 98 (1). However, given the emphasis placed on adherence to precedent and the Commission's acceptance of the Secretary's view that unless a special case is made under section 98 (2) for the use of replacement costs he is bound to adopt historic cost measurement under section 98 (1),⁶⁸ it seems likely that the case for inflation accounting must be made under section 98 (2). Given this, the adequacy of the statutory provisions warrants comment.

Sub-section 98 (2) has not as yet been the subject of considered interpretation by the Commission. It states that where in relation to any appraisal of the costs . . . or profits, the manufacturer etc. demonstrates special grounds calling for the consideration of the cost of replacement of current or fixed assets, the Secretary etc., in determining prices may have regard to any such costs, if satisfied, that such a course is necessary to preserve the financial stability or economic viability of the business.

It is submitted that the reference to any appraisal of the costs or profits refers to the assessment which must be made under section 98 (1) (b) and (c). The special grounds which are to be demonstrated by the applicant and which serve to evidence the need to take into account replacement costs relates to these assessments. Given that the applicant has demonstrated these special grounds, the pricing authority may then have regard to

⁶⁶ In logic any one single contrary instance is sufficient to refute a universal proposition.

⁶⁷ ante, p.22.

⁶⁸ *Milk Federation op. cit.* para.47.

replacement costs in determining price if satisfied that such a course is necessary to preserve financial stability and economic viability. Thus, two steps are required. Firstly, to demonstrate special grounds being an effect on costs or profits such as to evidence the need to take into account replacement costs, and secondly, this effect must be of such a degree that the pricing authority is satisfied that regard must be had to replacement costs in order to preserve financial stability and economic viability.

As worded, section 98 (2) refers only to the use of replacement cost valuations. This implies a system of accounting which considers only specific price changes of assets and not changes in the general level of prices nor changes in relative prices. As such, section 98 (2) does not, on its wording, provide for a full system of inflation accounting. Further, only assets are mentioned in regard to replacement cost valuation. This creates problems of interpretation when liabilities are considered. When prices are rising the existence of liabilities fixed in terms of a number of dollars provides a benefit to shareholders which offsets to a greater or lesser extent the cost of borrowing and eventual repayment. As such the effect of changing prices on monetary liabilities would be germane to an assessment of the financial stability of the business.

As noted above the Departmental representative stated in evidence that in his opinion section 98 (2) should be construed as referring to any basis of valuation other than historic cost despite the fact that the wording refers specifically and only to replacement cost valuation. This construction is, however, arguable. The legislature in using a specific technical term, which has no general meaning other than its specific meaning, must have been assumed to have known the meaning of that term. Alternative terms exist which are general in their import (e.g. inflation accounting, current value accounting, accounting for the effect of changing prices) but the legislature chose not to use them. To believe that the legislature in enacting a term with a specific and generally accepted meaning meant something different from what the word on the face of it states would throw statutory interpretation into uncertainty. Further, prior to the enactment of section 98 (2) the Government study on inflation accounting (Richardson Report, 1975) and the New Zealand Society of Accountants' exposure draft "Accounting in Terms of Current Costs and Values" (1976) had been published, were widely disseminated and discussed. It is difficult to believe that the usage of the term "replacement cost" could, in statute, be accorded a meaning different from that adopted in contemporaneous authoritative publications. It would be more appropriate to regard the usage of the specific term "replacement cost" as an error in drafting to be corrected by amendment rather than by Departmental interpretation.

The view⁶⁹ that section 98 (2) imposes a more severe profit test than that in section 98 (1) (ca) and is most appropriately used to "rescue" firms about "to go to the wall" requires comment. This interpretation was based on the reasoning that the word "preserve" in the phrase "to preserve financial stability and economic viability" suggested a level of profitability lower than under section 98 (1) (ca) and therefore gave section 98 (2) a different application from section 98 (1) (ca) where the corresponding phrase refers to "without affecting" financial stability and economic viability.⁷⁰ However,

⁶⁹ ante, p.24.

⁷⁰ *Brewers Association*. Decision No 54A *op. cit.* transcripts p.162;

it would seem that the meaning of the former phrase and its application are more correctly ascertained by reference to the whole sub-section of which it is a part and also to the intent of that sub-section rather than taking the two phrases out of their contexts, putting them in juxtaposition and analysing differences in isolation.

Section 98 (1) (ca) refers to the extent to which the firm's profit rate could be limited without affecting the financial stability and economic viability of the business. This requires the determination of a reasonable rate of return where reasonableness must, to be consistent with the objects and intent of the Act, be defined in terms of an external competitive standard. The firm's profit rate as calculated in (c) must then be limited, *ex-ante*, to this competitive level. If the profit test in section 98 (1) is confined to historic cost measurement then both the allowed rate of return and the base to which it is applied must be expressed in nominal as opposed to real terms. The product of the nominal allowed rate of return and the capital base measured in nominal dollars must yield profits (stated in nominal dollars) sufficient to maintain the firm's economic viability and financial stability.⁷¹

The intent of section 98 (2) was to explicitly provide the means to take into account the effect of changing prices on firm economic viability and financial stability in determining prices. It follows that in determining the magnitude of the price increase allowed, both firm profitability and the competitive profit rate standard must be measured after taking into account the effects of changing prices. In this context the word "preserve" refers to the need to maintain intact the economic viability and financial stability of the firm by taking into account changing prices.⁷² Contrary to the Departmental view there is no connotation of profits being at a level lower than under section 98 (1) (ca) such that firm continuity is imminently threatened.

In essence, the argument is that given the instability of the measuring unit, two rates of return can measure the profitability of capital and the allowed rate of return the nominal rate of return (provided for under section 98 (1)) and what may be termed the real rate of return (provided for under section 98 (2)). The nominal rate of return measures profitability before explicitly taking into account the effects of changing prices, while the real rate of return explicitly takes changing prices into account. Once the measure of inflation⁷³ has been defined then nominal and real rates of return represent two sides of the same coin. Both are valid measures of profitability, one being the equivalent of the other. There is no question of difference in degree (in real terms) between the profits allowed under section 98 (2) and section 98 (1) (ca).

⁷¹ The reasonableness of the profit rate and also the definition of the terms "financial stability" and "economic viability" are discussed below. The present discussion is concerned with the circumstances in which each of these sub-sections is to be applied and their interrelationship.

⁷² The Oxford English Dictionary gives as one meaning of preserve: "To keep up, maintain (a state of things)."

⁷³ Inflation refers to a reduction in the purchasing power of the measuring unit due to a general increase in prices. However, on the strict wording of section 98 (2) this definition is not provided for. Where the rate of specific and general price increases differ, the rate of inflation for a particular firm will depend on the bundle of goods and services it purchases.

Given agreement⁷⁴ upon the rate of inflation for a particular firm the nominal and real rates of return are directly linked via that rate,⁷⁵ viz.,

$$n = r + i + ri$$

where: n = nominal rate of return

i = inflation rate

r = real rate of return

Hence, the nominal rate of return equals the real rate of return plus the inflation rate plus the product of the two.

A simplified example may clarify the principles involved in applying the profit tests under section 98 (1) and section 98 (2).

Nominal capital base	\$100,000
Inflation rate	15%
Nominal allowed rate of return ⁷⁶	25%
Inflation-adjusted capital base	\$115,000
	(\$100,000 × 115/100)
Real allowed rate of return ⁷⁷	8.696%

	Capital Base	Allowed Rate of Return	Allowed Return
A. S.98 (1) nominal profit rate	\$100,000 ×	25%	= \$25,000
B. S.98 (2) inflation-adjusted profit rate	\$115,000 ×	8.696%	= \$10,000

Under A, both the capital base and the allowed or required rate of return are expressed in nominal dollars, and under B, in real terms. Gordon (1977) has shown that investors are indifferent between the required nominal rate of return (cost of capital) and the required real cost of capital on a price level adjusted rate base.⁷⁸

The allowed rate of return will vary according to whether the capital base is expressed in nominal or real terms. This must be so since all firms compete for funds in the same capital market and thus must offer equivalent real returns (adjusted for risk) if they are to attract capital. In other words, the end result — the ability to earn profits sufficient to attract or retain funds to ensure the continuity of operations — must be the same no matter which method of valuation is employed. If a nominal rate of return is applied to a current value base it would result in a profit return per dollar

⁷⁴ This is where the practical problem lies — viz., in ascertaining the appropriate system of measuring or accounting for the effect of inflation on the particular firm.

⁷⁵ Beaver, "Interpreting Disclosures of the Effect of Changing Prices" (1981) 37 Financial Analysts Journal 51 The term ri is the adjustment required to reflect the reduction in purchasing power of the return (interest) received at the end of the year. Where the return is earned continuously over time the effect of ri is insignificant and the relationship is approximately additive in r and i .

⁷⁶ For economic validity the allowed rate of return must be the required rate of return, viz., the opportunity cost of capital.

⁷⁷ $r = [(1 + n)/(1 + i)] - 1 = 8.69565\%$

⁷⁸ Gordon, "Comparison of Historic Cost and General Price Level Adjusted Cost Rate Base Regulation" (1977) 32 Journal of Finance 1501-1512

of invested capital greater than that required to retain or induce investment in the firm. Capital would cease to flow to those firms who were expected to receive the same nominal return on the (lower) nominal base, i.e. a lower real rate of return.

In summary, the foregoing has argued, contrary to Departmental interpretation, that the relationship between the profit tests in section 98 (1) and section 98 (2) is one of equivalence. Section 98 (2) should not therefore be applied as a rescue section to give a firm a higher allowed rate of return than would otherwise be warranted in order to prevent its demise. Inflation impacts different firms differently, and if the applicants can make a case under section 98 (2) then the sub-section should be applied irrespective of the firm's achieved nominal rate of return. The special grounds to be demonstrated must in these terms be construed as referring to a demonstrated impact of inflation on that particular firm in terms of the particular goods and services it purchases, such as to justify the application of current value accounting procedures. Further, the submission in *Milk Federation* that the same nominal allowed rate of return should be applied to both historic cost and current value bases has been shown to be error.⁷⁹

The conclusion must be that the present approach to the interpretation and application of section 98 (2) is misdirected and also that the sub-section is badly drafted and complex to interpret. It is not desirable for a specific valuation method to be codified into statute since this assumes that this one valuation concept is economically the most appropriate measurement method for all firms and all circumstances. All that is required is a provision to take into account the effect of changing prices on the economic viability and financial stability of the firm. This would do much to nullify the predominance of a literalist and legalistic approach to interpretation in what are essentially matters requiring an economic and accounting determination. The foregoing has also shown that the valuation method adopted cannot be determined independently of the rate of return applied to the capital base. The following section examines the question of the reasonableness of the rate of return and the definition of the terms economic viability and financial stability.

(4) The Reasonableness of the Profit Rate

In determining price the pricing authority is required to have regard to the extent to which the profit rate could be limited without affecting the economic viability and financial stability of the business. This requires specification of a benchmark standard denoting a reasonable profit rate where reasonableness must, to be consistent with the intent and objects of the Commerce Act, be defined in terms of a competitive standard. The assumption is that consumer interests are best protected by ensuring that monopoly or excess profits are not earned, ex-ante, whilst at the same time enabling the firm to earn profits sufficient to maintain its economic viability and financial stability such that it can continue to supply the goods demanded by consumers. The following sections describe and evaluate the reasoning and procedures applied by the Secretary and Commerce Commission in assessing the allowed profit rate.

(a) The profit rate standard — as applied

In ascertaining the allowed rate of return, reference is invariably made

⁷⁹ *Milk Federation op. cit.* Final Submissions for the Appellant, para.2.6.

to the average rate of return earned by companies included in the Reserve Bank of New Zealand industry statistics. In *Golden Bay* the Departmental representative submitted that⁸⁰ "if the rate authorised is not notably out of line with that earned by the general run of companies, then unless the Commission is willing to accept the proposition that the stability and viability of all these companies is at risk, then there can be no grounds for believing that this company's stability or viability are at risk". The statistics were described as an objective yardstick by which the profit performance of companies could be measured. The Commission in *Brewers Association* also stated that while⁸¹ "recognising that comparisons have their weaknesses, [it] believes that fair comparisons of returns on shareholders' funds can only be made with the results of other companies".

However, the Departmental representative has, in evidence, made it clear that the comparable earnings test is not the only criterion employed. Other factors taken into consideration include the profit rate allowed to the company in the past, particularly the rates authorised by the Price Tribunal, the rates of return allowed to other price controlled companies, the degree of leverage in the capital structure, the extent of competition in the industry and trading risk, what the companies under price control are prepared to accept as reasonable, what the Commission has accepted in appeals, the rate of inflation, and in group pricing applications the disparity of profit rates between companies.⁸² In *Bakers Association* a profit rate slightly higher than that otherwise allowable was authorised in order to favour those companies in the industry earning a relatively low rate of return. The weighting attributed to each of these factors has not been indicated.

The use of the RBNZ Corporate Financial Statistics as a comparative standard against which to assess the reasonableness of the firm's leverage and profit rates presents difficulties of comparability. Major deficiencies in their use include the lack of a constant sample and time period surveyed, lack of representativeness in relation to particular companies, distortions caused by tax incentives and discrepancies between definitions adopted for price control and external reporting purposes.

In an early decision⁸³ the Commission recognised the deficiencies of the RBNZ statistics and cautioned that their use was for a purpose for which they were not compiled but little attempt has been made to derive data series free of distortion for pricing purposes.

In determining price the procedure has in principle been to apply the allowed profit rate to the opening balance of shareholders' funds, to compare the allowed profits with those estimated on an annualised basis and to allow price increases sufficient to recoup cost increases and to bring profits up to the allowed level. This entails the absorption of cost increases to the extent that their recovery in price would result in profits exceeding the allowed level.

⁸⁰ *Golden Bay op. cit.* Closing Address for Secretary of Trade and Industry, para. 3

⁸¹ *Brewers Association*. Decision No 54A *op. cit.*, para.64.

⁸² *Bakers Association op. cit.* transcripts C7, 11, 21; *Golden Bay op. cit.* Evidence of the Assistant Director of Prices and Stabilisation, paras.2-6; *Brewers Association*. Decision No. 54A. transcripts 80, 108, 110, 146, 147.

⁸³ *Golden Bay Ltd. op. cit.* para.53.

(b) Evaluation

The criteria entering into an assessment of the allowed profit rate and its application warrant comment. The comparable earnings test will first be briefly evaluated followed by comment on the other factors considered by the Secretary in determining the allowed rate of return.

It is firmly established in the literature of the economics of price regulation that the comparable earnings test is substantially deficient as a means for identifying an economically reasonable profit and for determining whether price increases are justified in terms of their effect on the efficiency of economic performance.⁸⁴ This conclusion applies both where the comparative standard is an industry (or some other aggregate) average and where the standard is the average rate of return earned by other firms of comparable risk operating under competitive conditions. Given uncertainty, economic theory provides no grounds for assuming that average realised rates of return to capital should be equal in firms of comparable risk, even in perfectly competitive markets.

In part mitigation it may be argued that rate of return comparisons may be useful indicators of the fairness or equity of prices and profit rates. But equity is an elusive concept. Equity to whom and for what purpose must be specified. What may be equitable as between firms need not be equitable as between shareholders or consumers, or indeed equitable as between existing and new shareholders, or present and future consumers. Where equity and economic efficiency objects conflict, economic theory can provide no guidance to choosing between them. The choice is a socio-political rather than an economic one.

Although the frequently used industry average as a comparative standard may in a rough way indicate the firm's relative financial success it is, nevertheless, a dangerously unreliable standard by which to judge firm viability and the efficiency of operations — two factors crucial for price determination. The argument that a firm must earn a rate of return comparable to the industry standard, or to that earned in other industries, if it is to attract capital and survive in the long term is mis-specified when it is used to justify the comparable earnings test. Whether a firm survives depends not on its relative rank in the industry (as measured by its accounting rate of return) or on its relationship to an industry mean — the industry may be a steadily declining one. The critical factor determining viability is whether economic returns earned from supplying goods exceed the costs of supply, including all costs of capital. It is true that capital moves between industries in response to differences in expected rates of return but this proposition is by itself incomplete and thus insufficient to explain capital attraction and firm viability. Investment depends on whether economic rates of return exceed required rates of return — i.e. current market yields offered on alternative investments of comparable risk or, equivalently, the opportunity cost of capital. The realised average accounting rate of return cannot be used to represent this latter concept since they are conceptually different things. Hence the argument that ex-post accounting rates of return comparable to those earned elsewhere are necessary for economic viability

⁸⁴ See, for example, Myers, "The Application of Finance Theory to Public Utility Rate Cases", (1972) 3 *Bell Journal of Economics and Management Science* 80; Copeland, "Alternative Cost of Capital Concepts in Regulation" (1978) 54 *Land Economics* 348; Cliffe, *op. cit.* ch.7.9.

is strictly mis-specified. However, it is also evident that accounting rate of return comparisons are not devoid of any economic content. They give an approximate indication of the firm's relative ex-post performance but for the assessment of firm viability and for ex-ante decision making purposes the comparable earnings test needs severe qualification. It is thereby substantially deficient as a means of determining allowable profit rates and thus prices that best correspond to society's resource allocation needs.

Other factors taken into account by the Department are also subject to infirmities. The notion of an average degree of financial leverage was discussed above and found to lack sound economic grounding. Likewise basing current regulatory decisions partly on past decisions leads to a dangerously arbitrary standard. The reasonableness of the rate of return is to be determined under current and prospective conditions rather than by reference to what may have been reasonable in the past. Where past regulatory decisions influence present decisions the standard would become progressively removed from a comparison of competitive returns. This is particularly so when the basis for past decisions of the Price Tribunal is not fully known,⁸⁵ nor it appears were the standards set fully argued or determined on a sound economic basis. Neither past regulatory actions nor what the price controlled companies themselves are prepared to accept as reasonable provide the necessary independent standard to assess the allowed profit rate. Reference to the rate of return allowed to other price controlled companies also results in circularity. The rate of return earned by regulated companies is a function of past regulatory decisions. Since the rate of return is largely determined by past pricing decisions, it would be circular to use that rate of return to determine price. Again, other regulated companies returns do not provide the exogenous standard required to determine price. Finally, the setting of an industry-wide rate of return at a level sufficient to ensure the viability of companies earning relatively low rates of return distorts the price-cost relationship for the more successful companies, may ensure the survival of relatively inefficient firms and removes the incentive for those firms to improve their efficiency.

Although the allowed profit rate is, in principle, used to determine the magnitude of the price increase, in particular decisions the reverse has applied with the allowed profit rate being determined by the pricing authority's conception of a reasonable price increase. Two examples serve to illustrate the point. In *Bakers Association*⁸⁶ the allowance of all cost increases would have resulted in a rate of return on shareholders' funds of 33% which was considered too high. The Department then proceeded to determine what the allowed rate of return would be if a price increase deemed reasonable ($\frac{1}{3}$ cent per loaf) was granted. The resultant profit rate of 24.4% was considered reasonable and price set on this basis. Similarly in *Brewers Association*⁸⁷ the allowed profit rate on shareholders' funds (26.7%) was determined as an arithmetic consequence of the Department's decision to allow cost increases to be recouped in price so as to permit a partial restoration of the profit/sales ratio. In the particular case a profit rate

⁸⁵ The Price Tribunal decisions were not made public nor was it required to disclose the reasons for its decisions.

⁸⁶ *Bakers Association op. cit.* transcripts D17.

⁸⁷ *Brewers Association.* Decision No. 54A. *op. cit.* para. 73

of 25% on shareholders' funds was initially deemed appropriate which required the absorption of certain cost increases. Following objection by the applicant the Department allowed 50% of the costs previously disallowed to permit the profit/sales ratio to be partially restored to a level attainable in the past. The resultant profit rate on shareholders' funds (26.7%) was thus established as the allowed rate of return. In this instance the allowed rate of return was not determined in terms of the need for the companies to maintain their economic viability and financial stability but in terms of the need to improve the profit/sales ratio. This, in effect, departs from the principles of rate of return on capital regulation and adopts an internally determined standard — viz., the profit/sales ratio achievable in the past. Further, the evidence was that the Brewers in the past two years had exceeded the authorised profit rate on shareholders' funds (25%) earning 26.4% and 28.3% respectively. This being so, the declining profit/sales ratio must have been accompanied by the sales/capital ratio increasing at a faster rate. As such the solution called not for a restoration of the profit/sales ratio but an examination to ascertain if a higher profit rate on capital than that generally authorised could on this occasion be warranted on efficiency grounds. Failing this there existed no justification for allowing a profit rate in excess of 25%, assuming that this rate was appropriate to maintain the firm's economic viability and financial stability — a fact which was never established nor adequately argued.

To conclude. The procedures applied to determine the allowed rate of return under the Commerce Act have been heavily conditioned by practices and benchmarks established by prior pricing authorities operating under different statutory authority and under different economic conditions. The bases for their determinations are further not fully known nor does it appear that they were reasoned according to sound economic principles. The need for equity between firms and consistency with the past has been stressed rather than objects relating to the improvement of economic performance and the adequacy of profits in relation to investment and resource allocation needs. The issues of market power, risk and efficiency have rarely been discussed nor have they entered into pricing decisions in any systematic way.

In part this results from a failure to analyse the issues in terms of the end result required by section 98 (1) (ca), viz., to maintain the economic viability and financial stability of the firm and to set price in terms of this criterion as it relates to the objects of the Act. Instead, the debate has focussed on the means (viz., valuation methods and techniques of establishing the allowed rate of return) with no clear objective specified in operational terms. The means have been justified largely in terms of their traditional usage. To this extent the debate has been misdirected. The crucial issue is the effect of the allowed rate of return on the economic viability and financial stability of the firm and thus on the efficiency of economic performance and not on how the rate of return was determined. Thus, in *Hope Natural Gas Co.*⁸⁸ the United States Supreme Court held "it is the result reached, not the method, that is controlling". In the Court's view a return was reasonable if it provided a return sufficient to cover

⁸⁸ *Federal Power Commission v Hope Natural Gas Co. Ltd.* 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed. 333 (1944) at 600.

the operating and capital costs of the business under efficient and economical management, and it made little difference if by this standard the firm earned a large return on a small base or a small return on a large capital base.⁸⁹ No specific method of valuation or of determining the rate of return was therefore specified in statute. This approach permits the argument to be conducted in economic terms and frees it from a literalist and legalistic interpretation which has characterised the profit test specified in the Commerce Act. The following section outlines the meaning of the terms financial stability and economic viability and how they may be assessed in operational terms.

(5) *Financial Stability And Economic Viability — Assessment*

In cases coming before the Commission very little argument has been directed towards establishing the profit rate necessary to maintain the firm's economic viability and financial stability and below which profits should not be limited.⁹⁰ Neither of these terms have been defined by the Secretary or Commission, either in general or operational terms. Much of the evidence presented has relied on assertion rather than quantification.

(a) *Financial Stability*

The term financial stability refers to the long and short term solvency of the firm — that is, to the ability of the company to meet its current and long term financial obligations as they fall due.⁹¹

Indicators of short term financial stability focus on the size of the firm's reserves of liquid assets relative to the magnitude of its maturing liabilities. Structural measures of short term financial stability include:⁹²

$$\begin{array}{l} \text{The Working Capital} \quad \frac{\text{Current assets}}{\text{Current liabilities}} \\ \text{Current (Ratio)} \\ \text{The Liquidity} = \frac{\text{Current assets} - \text{Inventories} - \text{Prepaid expenses}}{\text{Current liabilities} - \text{Bank overdraft}} \\ \text{(Quick) Ratio:} \end{array}$$

Both these ratios are static measures, depicting the relationship between stocks of funds available at a particular date. They do not incorporate information about the timing and magnitude of future cash inflows and outflows. As such they reflect only one aspect of short term financial stability and require to be supplemented by cash budgets, statements of sources and uses of funds or flows of funds ratios. These measures consider the relationship between future cash inflows and out-flows during the period.

Measures of long term financial stability focus on (a) the firm's ability to meet both principal and interest payments to non-equity suppliers of

⁸⁹ In *Hope* the Court said "Rates which enable a company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate investors for the risks assumed cannot be condemned as invalid even though they might produce only a meagre return on the so-called 'fair value' rate base". See also *Bluefield Water Works & Improvement Co.* 262 U.S. 679, 43 S.Ct. 675, 67 L.Ed. 1176 (1923).

⁹⁰ In *Brewers Association* Decision No. 54A the Commission found it was unable to reach a conclusion on this matter since it was not covered adequately in evidence, para.69.

⁹¹ Lev, *Financial Statement Analysis: A New Approach* (1977) 22-27

⁹² Smith in *Fitzgerald's Analysis and Interpretation of Financial Statements* states ". . . the current ratio and the liquidity ratio are used as indicators of short-term financial stability, the proprietary ratio takes a longer view".(1977) 112.

capital and (b) on the extent to which non-equity capital is used to finance operations.

Relevant ratios include:

$$\text{The Proprietary Ratio:}^{93} = \frac{\text{Shareholders' funds}}{\text{Total liabilities}}$$

Smith states the proprietary ratio “. . . may be used as an aid to the formation of a judgment as to the financial stability of a concern at a particular point in time or as an indicator of unfavourable trends in financial stability over a term of years”.⁹⁴

$$\text{The Debt/Equity Ratio:} = \frac{\text{Long term debt}}{\text{Equity}}$$

As with the short term ratios, the above measures depict structural relationships, failing to indicate the cash or funds flow necessary to service long term liabilities out of profits. For this purpose, interest coverage ratios are used, viz.,

$$\text{Time Interest Earned ratio:}^{95} = \frac{\text{Earnings before interest and tax}}{\text{Annual interest payment}}$$

Again, funds statements are also relevant.

(b) Economic viability

Where a firm is placed under price regulation the object is to retain the efficiency gains that market dominance and economies of scale afford whilst preventing the exploitation of market power to the detriment of the consumer. It follows that price regulation should not adversely affect the ability of the firm to efficiently produce the goods needed by the economy. The question of maintaining economic viability therefore resolves to ascertaining those conditions which are just sufficient to permit continuity of profitable production.

For a firm to operate successfully the return on investment must at least equal the cost of capital. Returns will then be just sufficient to pay for the cost of using capital over time together with its eventual repayment. Profits will be adequate to reward and maintain investment at the level needed to generate the supply of goods. If returns fall below the cost of capital share price and the total market value of the firm will fall imposing a capital loss on existing shareholders.⁹⁶ Earnings are below what the firm's capital would have earned if it had been invested in its most profitable alternative use. Eventually the company will not be able to raise additional capital, may default on interest payments leading to possible liquidation. Conversely, a rate of return greater than the cost of capital indicates that

⁹³ Johnston, Edgar & Hays state “. . . this (the proprietary) ratio tests the capital structure for long term financial stability”. *The Law and Practice of Company Accounting* (6th ed. 1982) 372.

⁹⁴ Smith, *op. cit.* 112.

⁹⁵ The ratio may include finance lease payments in the numerator and denominator.

⁹⁶ If the firm's rate of return is less than the cost of capital the company would, within limits, still be able to attract capital but at the expense of existing shareholders. The reduction in share price means that a greater number of shares would be required to provide a given amount of capital, serving to dilute the equity of existing shareholders. The ability to attract capital is therefore only a necessary and not a sufficient condition for firm economic viability.

capital is earning more than that which is alternatively available on other risk equivalent investments. As a result, share price and firm valuation will increase. It follows that a business is economically viable in the long run only if its rate of return on capital is at least equal to the cost of capital. A rate of return set at this level enables the firm to maintain its value, to attract the capital needed to continue profitable production, ensures that the firm is not authorised to earn excess profits, and ensures that the employment of capital in the firm is economically justified in terms of the value of alternative output foregone.

The question of whether economic viability (as measured by the cost of capital standard) requires the firm to earn a real rate of return on its investment is relevant. This argument was advanced by the Brewers Association in justifying a before-tax nominal rate of return of 38.2%. The Association contended that a 38.2% nominal rate of return was necessary to cover inflation and provide a real risk-adjusted rate of return of 6% after tax. The latter was an amount thought appropriate for the industry.⁹⁷ The Commission declined to accept the argument, commenting that⁹⁸ "If . . . industries whose products are not price-controlled are generally not obtaining a return equal to inflation, then the Commission does not see that it is obliged to inflation-proof the return from a price-controlled product".

As argued above, economic viability requires the rate of return on investment to at least equal the cost of capital. This condition pertains irrespective of the inflation rate. Thus, if the rate of inflation is 16%, the weighted average cost of acquiring funds is 14%, then the firm will be economically viable if it earns a return at least equal to 14%, which in this case does not exceed the rate of inflation. The achievement of a real rate of return is therefore not strictly essential for economic viability. In this situation the firm is maintaining its viability at the expense of debtholders (or where the cost of capital is subsidised by Government, by taxpayers) whose capital in terms of its purchasing power will not have been maintained. The cost of capital standard therefore gives no assurance of full compensation for inflation since alternative investment opportunities available to investors may not be yielding full compensation for the decline in the value of money.

(c) *Interrelationship*

The profit test in section 98 refers to both financial stability and economic viability. This raises the question of whether one or both of these conditions need to be demonstrated.

Economic viability, as defined above, would in perfect capital markets and under conditions of certainty, encompass financial stability. The argument is as follows. To operate successfully the firm must be able to raise cash to purchase its fixed assets and to provide the working capital necessary to finance their daily operation. A firm which is expected to earn its cost of capital will be able to attract the capital needed to finance operations and also to meet the costs of servicing those funds and their eventual repayment. Hence, assuming well-functioning capital markets, a firm with profitable investment should always be able to raise finance and meet its costs.

⁹⁷ *Brewers Association Decision No. 54A, op. cit.* para 32.

⁹⁸ *ibid* para 66.

However, in reality the ability to obtain funds from the New Zealand capital market for economically justified investment is not solely a function of competitive market forces and rational investor behaviour. Government intervention in the money market to restrict the supply of credit, price freezes, controls on dividend rates, institutional lags in raising finance, seasonal cash requirements and inflation limit the firm's ability to raise finance externally in the amounts and at the times required so as to obtain the synchronisation of cash inflows and outflows necessary for financial stability.

Hence, for practical purposes, financial stability must be analysed separately from economic viability and may, in particular cases, constitute grounds for raising the rate of return in order to obtain more funds. But since these grounds rest on the assumption that the capital market will not supply such funds, or may do so only at an exorbitant cost, the burden of proof must rest on the firm to demonstrate that the use of the funds is economically justified in terms of the return to be generated on them, that its cash flow and reserves are too low to meet cash demands and that it has a reasonable balance of retained earnings to external capital. Additionally, permanent increases in price should not be granted for temporary financial instability. An actual or projected impairment of economic viability would, however, constitute sufficient grounds for a price increase, given that demand for the product is such as to justify the allocation of resources to the firm.

The decision in *Golden Bay*⁹⁹ provides an example of the reasoning adopted by the Commission in determining issues of economic viability. The company applied for an increase in the allowed rate of return (from 21.5% to 26%) to provide funds for current operations and future capital development, to pay a reasonable dividend and to attract outside investment. It was acknowledged that the firm's profitability and cash reserves were low and deteriorating and that it had not managed to achieve the allowed rate of return in the past two years. The appeal centred on the profit rate necessary to permit continued viability and the need for a price increase to secure capital to finance investment.

The Commission, after noting difficulties imposed by lack of adequate evidence, held that it could not grant the appeal in terms of the evidence submitted and on the considerations in section 98. Nevertheless, the Commission considered it just and equitable that the company should be granted a permanent price increase by way of relief of 57¢ per tonne. This determination was made after balancing the future needs of the company against the interests of users of cement and the economy, the weights assigned being a matter for the Commission. The decision raises a number of issues.

- (a) The Commission held that an increase in the authorised rate of return was not justified in terms of the section 98 criteria. Hence the existing authorised profit rate (21.5%) must, in terms of the mandatory criteria, have been considered sufficient to maintain firm economic viability and financial stability. The 21.5% profit rate should therefore have enabled the firm to obtain the finance needed for operations. This questions the justification for the price increase granted outside of the criteria to provide pricing relief which was furthermore to be permanently perpetuated in the pricing structure.
- (b) The price increase granted must have necessarily raised the rate of return above the authorised rate, suggesting that 21.5% was not the appropriate profit rate as had been determined. In its decision the Commission gave no indication of why 21.5% was the

⁹⁹ *Golden Bay Cement Co. Ltd. op. cit.* 15.

economically appropriate rate of return. It was merely assumed to be so. That the rate was set by the prior Price Tribunal in 1974 was stated to be of major relevance and its appropriateness under present conditions (1976) and in light of the company's investment plans was assumed. A price increase granted outside of the statutory pricing criteria and on the amorphous grounds of justice and equity as subjectively perceived by the Commission cannot provide the clear and consistent guidance required by firms for future investment planning.

- (c) The inability of the company to obtain capital externally rather than by increasing prices now to provide funds for future capital expansion was not established nor argued. No evidence was provided by the company or required by the Commission to indicate why the capital market would not finance future development nor was it shown that once finance was available the investment would be profitable.

The above has discussed and evaluated the administration of New Zealand price policy as it relates to profitability assessment. The following section comments on its major features and outlines directional changes necessary if price policy is to be an effective complement to competition policy. The article concludes with specific recommendations regarding techniques of profitability assessment.

PART V CONCLUSIONS AND RECOMMENDATIONS

(1) Major Features of Policy Administration

Price policy as administered under the Commerce Act has been heavily influenced by the regulatory philosophy and procedures applied under past pricing legislation, particularly those characterising the former Stabilisation of Prices Regulations. This has been facilitated by the use of the same personnel to administer both types of policy; viz. across-the-board stabilisation policy and selective price justification policy within the context of a competition statute. The emphasis has been on controlling prices and limiting profits with the object of stabilising prices and of protecting the consumer from price rises based on firm market power. As a consequence much of the reasoning behind pricing decisions has been based on the need (a) to maintain equity both between different firms and between consumers and producers, and (b) to be consistent with past pricing procedures. The pricing authorities have looked to past experience under different statutory authority and by stressing the need for consistency have imported past attitudes and concepts into current decisions. This has been supported by a legalistic approach to the interpretation of the pricing criteria. Rather than looking to the economic substance of the issue and determining the performance measures and standards most appropriate in light of the intent and objects of the Act, the approach has, in large measure, been to analyse the criteria by applying the rules of statutory interpretation and to rely on past practice. This approach is unsuited to the effective administration of price justification policy. Its adoption has been facilitated by the fact that the Commission is an appeal body and is required to act judicially. Additionally, a number of the then Commission members were lawyers or had had legal training and proceedings have taken legal form with representation by Counsel.

The criteria are expressed in statutory form but this, of itself, need not necessarily lead to a legalistic interpretation as evidenced by the administration of price policy under the United Kingdom Price Commission Act 1977. There is, however, a danger in having the detail of pricing procedures specified in statute, e.g. the particular profitability measures and valuation methods to be applied. Detailed legislation facilitates the

adoption of a literalist approach to interpretation, contributing to a reluctance to examine the underlying economic issues. Formally established criteria are, however, required to avoid arbitrariness, to minimise business uncertainty and to ensure their consistency with policy objects. If no formal criteria are specified they soon evolve through pricing decisions, but in an ad hoc manner and accompanied by greater uncertainty. In the pricing decisions reviewed detailed statutory specification and the concomitant need to apply the legal rules of statutory interpretation have, by their construction in particular instances, served to obscure the economic issues involved in price determination.

Neither the Secretary nor the Commission have seen their role as an innovative one nor that they should attempt to improve pricing practices or conduct an efficiency investigation. In determining issues the Commission has restricted itself to the often inadequate evidence presented before it, without adopting an active investigatory role. Provided costs are incurred they are accepted at face value with no further inquiry into firm efficiency, price structures and practices. Proceedings have essentially amounted to a cost justification process plus an allowance for an acceptable profit rate based on an historic cost accounting rate of return. The appropriateness of the price level has not been judged within the context of a structure, conduct, performance appraisal of the relevant market. Issues of risk and market power have not entered into pricing decisions in any systematic way nor have been subject to definition and quantification. The dynamic function of profits in providing both the incentive and means for the investment needed to improve firm efficiency and to provide for economic growth has received little recognition. In all, the administration of price policy has been unsophisticated with little reliance on criteria other than those of allowable costs and profitability.

Price determination involves many intractable issues. The Commission and Secretary, in attempting to resolve such issues, have invariably looked to past New Zealand experience, albeit under different statutory objects and under different economic conditions. There has been little or no reference to contemporary overseas experience and developments in pricing philosophy and policy. Nor have the methods of price determination and profitability assessment used by comparable overseas pricing bodies been examined to ascertain their rationale and application in the New Zealand context. As a result price philosophy and policy has in its implementation become successively inbred and has remained essentially unchanged over time. This failure to capture the spirit and intent of the Commerce Act has become more marked with time as Government policy emphasis has changed in response to changing economic and market conditions whilst pricing philosophy and interpretation commensurate with such conditions have ossified. This has remained so despite the incorporation of selective price policy into a competition statute and an increasing emphasis in public policy towards deregulating Positive List firms and increasing competition to improve firm efficiency and economic performance. The conclusions must therefore be (a) that an unduly legalistic approach has been adopted in interpreting the legislation which has compounded the difficulties of determining the economic and accounting issues involved in profitability assessment; (b) that the present administration of Positive List pricing policy is, in many respects, inconsistent with the intent and objects of the Commerce

Act and at variance with public policy; (c) that inappropriate methods of profitability assessment have been applied to determine justified prices and to ascertain the level of profits needed to maintain firm financial stability and economic viability and; (d) that the statutory provisions to take into account replacement costs in determining prices have been subject to an error of interpretation.

(2) Changes in Pricing Policy

The appropriate form of policy must be derived from the objects of the Commerce Act. The Long Title identifies two main objectives — the promotion of consumer interests and the efficient and effective development of industry. To achieve these objectives the Act seeks to provide conditions (a) to ensure that competition is effective; (b) to improve productivity and efficiency; (c) to prevent mischiefs from monopolies and trade practices.

Price policy can contribute towards these two objectives by working directly through (b) and (c) above. Specifically, where there is an efficiency/market power trade-off such that the existence of dominant firms must be accepted price policy by curbing the abuse of market power can facilitate improvements in economic performance. Similarly, inquiries into firm pricing behaviour to identify causes of excessive profits or cost inefficiency directly promotes technical and allocative efficiency. Where necessary, prices could be regulated as a remedial measure and, if appropriate, suggestions made for improvements in pricing procedures, the efficiency of managerial practices and techniques and desirable structural or organisational changes. This would provide a public check on the behaviour of firms where large amounts of resources are affected by investment decisions and where competition fails to provide this restraint.

This approach attributes to price policy a resource allocation function, the object being to obtain the most efficient economic performance possible from the firm and industry. It is therefore consistent with the economic efficiency objects adduced for competition policy. The approach suppresses the income redistribution function of price control. The assumption is that consumer interests are best promoted by ensuring firms produce their goods at the lowest price consistent with a technically efficient use of inputs and, where it is necessary to regulate price, by ensuring firms earn a profit rate sufficient to provide the incentive and means for the investment needed to improve efficiency. Where it is desired to change the present income distribution this is achieved with greater expediency, more certainty and effectiveness by other policy instruments directly concerned with this issue, e.g., fiscal policy and the structure of welfare payments.

The goal of price stability is pursued (a) by limiting prices where firms misuse their market power either by charging excessive prices or by attempting to pass on costs of their own inefficiency; (b) by ensuring conditions for the exercise of market power are reduced such that the ability to pass cost increases on into price increases is diminished; (c) by enabling the firm to earn profits sufficient to undertake the investment needed to improve efficiency and to provide for economic growth; (d) by efficiency studies, creating an incentive to seek new efficiencies and ways of keeping costs and prices down.

It is not proposed to outline further details of the policy approach here, except to suggest that the approach adopted by the 1977–1979 United Kingdom Price Commission affords a workable basis upon which to develop

a policy suited to New Zealand market conditions. It is clear, however, that such a policy would have to be selective, flexible and intelligently applied by competent personnel and supported by adequate research resources.

(3) Recommendations — Profitability Assessment Techniques

The administration of New Zealand Positive List pricing policy has been characterised by uncertainty about the appropriate profit rate and methods to use to determine prices and to ascertain the reasonableness of the profit rate. In this respect the following lists in summary form the purposes to which alternative measures of profitability and price-cost relationships are most appropriately applied.¹⁰⁰

- | | |
|---|---|
| (a) To measure the profitability of capital | — DCF rate of return ¹⁰¹
— rate of return on capital employed (the most appropriate ARR) ¹⁰² |
| (b) To indicate returns obtained by shareholders | — rate of return on shareholders' funds |
| (c) Managerial performance evaluation | — profit/total assets |
| (d) Price justification | — DCF/cost of capital test
— rate of return on capital employed/cost of capital test (the most appropriate ARR) |
| (e) To indicate the reasonableness (normality) of the profit rate | — the cost of capital standard |
| (f) Across-the-board price stabilisation | — profit/sales (base period profit margin standard) |
| (g) indicator of price-cost margin | — price-economic cost margin
— profit/sales (the most appropriate ARR) |

The profitability measures found most appropriate for Positive List price determination (d) and for assessing the reasonableness of the profit rate (e) are neither applied in practice nor are explicitly provided for in the Commerce Act pricing criteria. Instead, the rate of return on shareholders' funds has been the preferred profitability measure and less frequently, the profit/total asset ratio. In isolated cases the profit/sales ratio has also been applied. In determining the reasonableness of the profit rate the practice has been to rely, *inter alia*, on the comparable earnings test, a practice which is contrary to the findings in (e). Of the three profit rates specified by the Commerce Act none have been used by comparable overseas pricing bodies as their major indicator of profitability. It is therefore recommended that:

- (a) The profit tests in section 98 (1) (c) and (ca) of the Commerce Act be re-appraised

¹⁰⁰ There are substantial economic qualifications concerning the use of any accounting profit rate for the purposes stated. The measures listed are merely those which most closely approach the theoretical requirements for an economically valid measure.

¹⁰¹ Discounted cash flow.

¹⁰² Accounting rate of return.

in light of the findings that the tests in (d) and (e) above are more appropriate indicators than those specified in the Act.

- (b) Consideration be given to redrafting the provision to take into account replacement costs in determining prices (section 98 (2)) in light of the arguments adduced in Part III C above.