The Economics of the Commerce Act

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PREFACE

This monograph contains a collection of commentaries on various aspects of the 1986 New Zealand Commerce Act by New Zealand, Australian and US economists. The Act has stimulated a considerable amount of economic analysis, and these readings represent some of this. There are three parts : the first two chapters are introductory ones. Then chapters three to five represent aspects of merger issues. Finally chapters six to eight cover various trade practices.

A range of opinions are expressed in this monograph, in line with wider views on the Act held amongst economists. Opinions expressed in this monograph are those of the individual authors, not necessarily of their employers or the NZIER.

I wish to thank the authors for their contributions, Kerrin Vautier for overviewing the chapters and Geraldine Sellens for typing and editorial work.

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CHAPTER ONE

ASSESSMENT OF THE COMMERCE ACT IN TERMS OF ECONOMIC PRINCIPLES

Susan Begg and Stephen Jennings[1]

In this section the explicit statements of principle and the application of those principles adopted by the Commerce Commission and the High Court which were outlined in Section 3 and 4 are assessed against the principles outlined in Chapter One.

1.1 Objectives of the Commerce Act

In NZ Business Roundtable (1988) we noted that people would attempt to maximise their welfare subject to the constraints facing them. They will undertake transactions to exchange (rights to) resources where such actions are mutually beneficial. The key policy question concerns how to set the constraints facing individuals so that their transactions with one another allow the maximum mutual benefit to be derived from scarce resources. We noted that in some circumstances the government could change the property right constraints within which transactions take place, so that further welfare-enhancing transactions could be made. Further transactions will occur if the sum of transaction and production costs are reduced by government intervention. Viewed in another way, antitrust laws will improve welfare if they improve the sum of productive and allocative efficiency compared with the situation in which antitrust intervention does not take place.

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1. This paper is drawn from *Antitrust in New Zealand : The Case For Reform*, New Zealand Business Roundtable, 1988.

The key economic objective of maximising efficiency or minimising the sum of production and transaction costs is not recognised explicitly by the Commerce Act, nor has the Commission or High Court consistently adopted efficiency as an objective in its interpretation of the Act.

From an economic perspective there are two major weaknesses in the interpretation of the objectives of the Act by the Commission and the High Court.[2] First, both bodies have generally failed to recognise that competition is valued as a process for promoting efficient resource utilisation, not as an objective in its own right. Their approach tends to direct attention to the degree of overtly rivalrous behaviour when assessing lessening of competition and the acquisition and strengthening of a dominant position, rather than to the impact of different practices on allocative efficiency. The High Court in its statements of principle has explicitly emphasised the importance of rivalrous behaviour. The focus on competition per se also obscures the potentially valuable function of the Act's authorisation provisions as a mechanism for balancing productive efficiencies against losses in allocative efficiency.

The notable exceptions to this are certain statements from the *Goodman/Fielder Wattie* and *Co-operative Dairy* cases. The approach adopted in *Co-operative Dairy* represents a departure from the previously stated principles and practices stated by the Commission in previous decisions. In that case, the Commission explicitly discusses competition in terms of its promotion of allocative efficiency.

Secondly, the Commission's very wide interpretation of public benefit significantly increases the risk that the Act will be used to pursue a myriad of different objectives, the great majority of which would be achieved at lower cost through more direct instruments of government

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2. This is not to say that the Commission or the High Court's approaches are based on an incorrect application of legal principles of interpretation.

policy. A wide-ranging public benefit test will also tend to create conflicts, in applying the Act, with the objective of economic efficiency and ultimately compromise the potential efficiency gains deriving from the Act.

1.2 Dominant Position

The two-step procedure embodied in the Act for evaluating takeover and merger applications could be reinterpreted as coping with both allocative and productive efficiency considerations: the dominance provisions of the Act lend themselves to the assessment of the implications of a proposal for allocative efficiency while the public benefit test provides scope for the Commission to account for any countervailing productive efficiencies.

The Commission has identified market dominance as a test of market power. This is consistent with the approach suggested in chapter one of NZ Business Roundtable (1988): the existence of market power indicates situations in which potentially beneficial transactions are not being undertaken.

The High Court has defined dominance in terms of the ability of a firm to "act independently" and in some cases implicitly adopted the test of market power. It appears, in general, to have ignored the approach taken by the Commission in studying similar issues. The statement on dominance in the *Continental Can* case referred to in both the *Budget* and *Festival* cases emphasised the importance of market structure in terms of assessing aspects of the market such as share of the market. These principles are not consistent with our earlier approach; for example, the potential for new entry will constrain an incumbent's market power.

The Commission's approach to market power is a valuable first step and is more developed in economic terms than the approach adopted by the High Court. However, the key antitrust objective of economic efficiency has usually not been recognised by the Commission or the High Court. As a result the market power formulations expressed in *News/INL* and

Magnum/DB do not provide a rigorous basis (in terms of the efficiency objective) for assessing dominance. As discussed earlier, virtually all firms have some discretion over their prices and output levels yet still face external market constraints. Because neither the Commission nor the High Court has outlined the policy objective(s) underlying the dominance test, it is impossible using their formulation to determine why or when firms have too much discretion and are subject to too little restraint.

Similarly, the list of factors given by the Commission in *News/INL* does not provide a rigorous basis for assessing dominance. What weight should be given to each of the factors listed in *News/INL* and how should the information involved be synthesised in particular cases? The dominance principles adopted leave these questions unanswered.

The failure to specify sound economic objectives for the dominance test increases the risk that the application of the test will be based on administrative rules and legal precedent rather than a rigorous economic framework. Although the dominance principles adopted by the Commission are broadly consistent with the economic efficiency objective they provide significant scope for interpretations and applications that result in efficiency-reducing outcomes.

Vertical Integration

The principles for analysing vertical integration adopted by the Commission are based on the US Justice Department's 1984 Merger Guidelines and are in line with mainstream thinking on the competition implications of vertical integration.

Bare Transfer of Monopoly Power

The Commission correctly recognises that to decline mergers and takeovers merely because they involve a transfer of monopoly power from one entity to another would introduce an unwarranted restriction to the market for corporate control. Such a restriction would reduce the threat to under-performing corporate management teams and would

reduce the overall efficiency of the corporate sector. Restrictions on the bare transfer of monopoly power would also reduce the flexibility for organisational and asset restructuring in response to changing economic circumstances.

The High Court's statement in *Compass* that it would be difficult not to view a bare transfer of monopoly as an acquisition of a dominant position is therefore of concern.

Essential Facilities Doctrine

The "essential facilities doctrine" introduced in the *Budget* case fails to discuss the implications of allowing access on a "fair" basis to privately-owned resources. It provides little guidance in assessing when market power would be such a problem that the right to exclude others from access to a resource should be attenuated. The approach adopted does not allow for consideration of trade-offs in terms of reduced incentives to invest or maintain such resources.

1.3 Constructs for Assessing Market Power

The greatest weakness in the Commission and High Court analyses of market definition, market concentration and barriers to entry is the failure to adequately relate these constructs to the task of assessing market power or the how the appropriate relationship between the constructs in conducting such an assessment. In a number of cases they have given inadequate recognition to the fact that market definition, market concentration and barriers to entry are analytical tools for assessing the overall constraints on incumbent firms. As a result the principles laid down concerning these constructs have tended to be ad hoc and developed in relative isolation from each other. They have not specified what types and degrees of market response they consider should be evaluated at the market definition/market concentration stage and those which should be incorporated in the analysis of entry barriers. For example, should imports which would enter the New Zealand market in response to a small domestic price increase be included in "the market" (as the US Merger Guidelines propose) or be

captured in the analysis of entry barriers? Where should the impact of the effective excess capacity of competitors be taken into account?

Because of their failure to develop a unified treatment of market definition, market concentration and entry barriers the Commission and the High Court have frequently been inconsistent in the weight they have attached to different market responses and, on occasions, have ignored important constraints.

Market Definition

Market definition is important in practice because it assists in organising information relevant to an assessment of the constraints on the exercise of market power. The Commission's and the High Court's definition of a market "as a field of actual or potential transactions between buyers and sellers amongst whom there an be substitution... given a sufficient price incentive" (*Edmonds/Tucker*) is, in very general terms, consistent with the market definition principles. However, the definition of market adopted in the *Edmonds/Tucker* case is very vague and not explicitly phrased in terms of evaluating constraints on market power. Again, this heightens the risk of analysis that is directed by administrative rules and ad hoc theorising rather than underlying economic objectives. In contrast the market definition framework contained in the US Merger Guidelines is well-founded, tight and forces practitioners to relate the exercise of defining markets back directly to the constraints facing incumbent firms. The introduction of the concept of sub-markets in the *Budget* case adds nothing to the analysis of the constraints on the exercise of market power and instead tends to confuse matters. In that case it appears to have resulted in the Court ignoring real constraints imposed by firms operating outside of the "sub-market".

The reference to "commercial common sense" is a further weakness in both the High Court's and Commission's market definition principles. Business people's perception of the markets in which they operate is heavily coloured by the most immediate and direct competitive pressures to which they are subject. As a result "commercial common sense" frequently neglects many of the demand and supply responses

that would arise from a small but non-transitory increase in price above prevailing levels. For example, particle board manufacturers tend to perceive themselves as part of the particle board market, or alternatively, a section of the panel products market. However, flooring is the most important end use for particle board in New Zealand and approximately half of new flooring is concrete. In the *FCL/NZFP* merger the Commission (correctly) accepted that particle board and concrete were part of the wider flooring market. To some extent, this approach conflicted with the "commercial common sense" of the participants in the market.[3]

Market Concentration

The Commission's discussion of market concentration correctly notes that there is no simple correlation between market concentration and collusive behaviour and that, in assessing dominance, market shares should not be viewed in isolation from other market information. Because of the considerable complexity of the relationship between market concentration and the likelihood of market dominance it would be inappropriate for the Commission to utilise rigid market share/concentration guidelines, except perhaps as a coarse filter to quickly approve obviously harmless transactions. The High Court on the other hand appears, at least implicitly, to accept that a high concentration equates to a large extent with dominance.

Nevertheless, both the High Court's and the Commission's framework for assessing dominance (and probably the quality of their decisions) would be improved by the adoption of a set of principles outlining the general reasons for, and ways in which, market concentration affects the likelihood and extent of market power. This would facilitate the development of a richer analytical framework and ensure that any consideration of market concentration measures was based on sound

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3. See Parry (1988), pp 6-7 for another critique of the "commercial common sense" approach to market definition.

economic principles. For example, in evaluating the relationship between the magnitude of the likely response of competitors to a price rise by a particular firm and the market share of that firm, a richer framework would direct attention to the capacity constraints of existing firms and their potential for expanding output and capacity in response to higher prices. It would also highlight the interrelations between market concentration and entry barriers in the context of assessing the constraints on market power.

Barriers to Entry and Potential Competition

The Commission and the High Court have made very few explicit statements of principle concerning entry barriers and potential competition. The most significant general statement made by the Commission is that potential competitors will constrain incumbent firms when de novo entry is relatively easy. The High Court noted that a high barrier to entry implied a lack of competition in the market. The Commission and the Court have not set out any general principles for determining what types of market constraints are relevant in assessing entry barriers. In particular, their explicit statements of principle do not relate entry barrier analysis to the assessment of demand and supply substitutability.

The Commission and the High Court have generally also failed to recognise that many "entry barriers" protect the exclusivity of property rights in various resources and investments and thereby fulfill a valuable economic function. This failure heightens the risk of unwarranted interventions designed to lower entry barriers. For example, the exclusivity of property rights to key assets could be undermined as a condition of approving a takeover or merger proposal.

1.4 Substantially Lessening Competition

The Court's assessment of competition has emphasised the importance of rivalrous behaviour and the necessity for competitors to be on an "equal footing". Such an approach fails to recognise that economic

efficiency is the underlying concern of policy and that competition *per se* is not.

The Commission has argued that in determining whether a practice has the effect of substantially lessening the competition, regard must be had "to all of the surrounding market circumstances (including the role of substitutes, potential competition etc) in making a judgement as to the degree of market power created by the practice" (*Whakatu*, para 24, (ii)). This approach is consistent with an underlying concern with resource allocation and, in broad terms, in line with the interpretation of dominance adopted by the Commission.

However the Commission has also interpreted "substantially lessening competition", as involving a lower competition threshold than that applying to market dominance. The High Court in the *Lion/Commission* case supported the Commission's approach of assuming that dominance was a higher standard in respect of competition than a mere lessening of competition. In *Whakatu* the Commission argued that this approach "appears to have been consciously made by the legislature" and noted that the "Commission considers it proper to draw attention to Parliament's adoption of what appears to be a relatively low competition threshold..." (Decision No 204, para 24 (iii)).

Regardless of the reasons for the interpretation by the Commission and the High Court, there is no obvious economic rationale for distinguishing between takeovers and mergers and other contractual agreements in establishing jurisdiction and enforcement criteria for competition rules. Concern with efficiency should be the objective underlying the competition rules applying to both mergers and takeovers and "restrictive" trade practices.

A lower enforcement and jurisdiction threshold for trade practices runs the risk of distorting decisions regarding business organisation and encouraging the aggregation of business units in place of non-standard contractual arrangements between separate entities. Klein, Crawford and Alchian (1978, p236) note that:

> "[m]any long-term contractual relationships (such as franchising) blur the line between the market and the firm. It may be more useful to merely examine the economic rationale for different types of particular contractual relationships in particular situations, and consider the firm as a particular kind or set of interrelated contracts. Firms are therefore, by definition, formed and revised in markets and the conventional sharp distinction between markets and firms may have little general analytical importance. The pertinent economic question we are faced with is; what kinds of contracts are used for what kinds of activities, and why?"

Franchising and many other "vertical" contractual devices are often used for similar reasons as vertical integration. The Commission's and High Court's interpretation of "substantially lessening competition" provides an incentive for firms using such vertical contracting arrangements to vertically integrate to reduce the risk of exceeding the competition threshold for the enforcement and jurisdiction of trade practices. Such a distortion could impose severe efficiency losses. The firms using vertical contractual arrangements have selected those methods of conducting business ahead of all other sets of contracts available to them. Vertical integration may involve diseconomies of scale for the organisations concerned[4] and impose major costs when measured against the initial contractual arrangements.

Their interpretation of "substantially lessening competition" also involves the risk that standard contractual arrangements (for example, "simple" sale and purchase agreements) will be substituted for more efficient but complex forms of business. A competition criterion that deters business practices involving insufficient market power to warrant

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4. The transaction cost diseconomies of large organisations are analysed in detail by Williamson (1984).

intervention is likely to raise business costs and discourage some practices that are desirable from a national benefit perspective.

Finally, it is inconsistent to have a lower competition threshold for jurisdiction and enforcement purposes than that applied for the purposes of balancing the detriment from particular trade practices against any countervailing benefit to the public (ie. section 61(6)). This approach subjects trade practices to the authorisation provisions of the Act even though mergers and takeovers involving the same level of market power would not trigger the market dominance test.[5]

The approach set up in the Act and its interpretation by the High Court and the Commission is not logical in economic terms. This is particularly so given the Commission's view that in applying the authorisation provisions of the Act, the effect of both trade practices and mergers and takeovers should be judged in terms of their effect n market power (see *Whakatu* para 24 (vi)). While this inconsistency would be immaterial in a world of certainty and perfect and costless regulation, in reality it will deter, and possibly preclude some efficient contractual arrangements. This is especially so given the practical difficulties in measuring benefits to the public, and the evidential requirements concerning public benefit imposed by the Commission.

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5. For example in *Whakatu* the Commission found the degree of lessening of competition was "real or of substance" and therefore concluded that the "agreement concerned was one to which s.27 applies" (para 54). This conclusion was made even though the Commission recognised that the:

> "agreement which is the subject of this case does not prevent or inhibit future competition between the applicants and there is no evidence that the opportunity for competition to occur in the defined market dies not exist ... No-one suggested that any one of the remaining operators would have a sufficient degree of market power (or even a substantial increase in market power) to control price or output." (Decision No 205, para 58)

A further weakness in the analysis by the Commission and the High Court of substantially lessening competition is the failure to outline a framework for assessing the degree of market power arising from particular practices. To an extent this is understandable because the issues to be analysed and appropriate method of analysis depend in part on the nature of the contractual arrangements being considered. Nevertheless, it would be feasible and desirable to establish broad guidelines for the analysis of particular classes of contracts, e.g. agreements such as that considered in *Whakatu* for the reduction of productive capacity. The questions given in paragraph 25(iv) of *Whakatu* are far too loosely specified to be of assistance in conducting rigorous analysis. The questions posed by the Commission increase the risk that the analysis of trade practices will be based on narrow legal formulations rather than a rigorous framework that accurately reflects the underlying policy concerns.

1.5 Public Benefit

Nature of Public Benefit

The public benefit provisions of the Act lend themselves to the assessment of productive efficiencies, to be weighted against losses in allocative efficiency arising from enhances market power. However, as noted in Section 3.1 above, the Commission has argued that "there appears to be no limitation as to the nature of public benefit which may be claimed" (Decision No 205, para 25 (i)). This interpretation opens the way for the entire spectrum of public policy and interest group objectives to be pursued through the public benefit provisions of the Act. As discussed in Chapter One, antitrust law should be directed by the objective of economic efficiency. Other objectives are generally met more effectively and at lower cost through more closely targeted instruments of government policy. The very broad interpretation of public benefit adopted by the Commission is likely to complicate the administration of the Act and compromise the objective of economic efficiency.

Weighting to Alternative Public Benefits

The Commission's express statements of principle concerning public benefit indicate that the Commission considers the public benefit provisions of the Act to be an appropriate means of pursuing distributional objectives.[6] The notable exception to this is the *Co-operative Dairy* case in which the Commission explicitly rejected a distributional objective for antitrust policy.

The Commission has provided no analysis to demonstrate that differential weighting is an effective means of pursuing any valid policy objectives. Antitrust is poorly suited to the pursuit of distributional objectives. The approach taken by the Commission also runs the risk of compromising the efficiency objective. In several cases, the Commission has given minimal weight to potentially very large efficiency gains because of the identity of the recipients of those gains. On the basis of this aspect alone, there is a reasonable probability that the Commission has declined mergers that would have enhanced economic efficiency.

This issue has recently been emphasised by Australian economists commenting on the public benefit test. Officer makes the following comments:

> "It would be, in my opinion, redundant to have a Part IV [of the Australian Trade Practices Act] concerning itself with consumer protection on the assumption that somehow consumers are at a disadvantage in their contractual relations with producers and to give greater weight on **per se** grounds to consumers relative to producers in any summation of individual benefits to reach society's total benefit. There is no theory or evidence to suggest that consumers as a class are necessarily

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6. See especially *Whakatu* (para 25(iv)), *Amcor/NZFP* (para 53 (v)) and *FCL/NZFP* (paras 167-169).

different from producers or poorer, to the extent that a dollar distributed to consumers away from producers is going to raise society's total utility (benefit)...

In short, it is a mistake to believe that as a general principle allocating resources or dollars away from companies to consumers increases the net welfare of society. The reverse also would be without foundation. Moreover, as I have been at pains to point out, Part IV of the Trade Practices Act is aimed at resource allocation amongst the productive units and not at a redistribution of wealth. In these circumstances, the public, in the context of section 90 of the Act, should mean everyone in society and no one member or group should be given greater weight in any assessment of benefits or detriments to any other individual or group within the society. Under this proposition a dollar is worth the same to the company as a dollar to its clients (consumers)" (1987, pp 7-8).

Similarly, Williams argues that:

"[i]t is clear that despite the urgings of economists, the Australian Trade Practices Commission, and New Zealand's Commerce Commission do not always adopt the standard of economic efficiency in their evaluation of public benefit. In particular, they frequently depart from Hume's law that a dollar is a dollar. Because they value benefits to consumers above benefits to, say, shareholders, both bodies have hesitated to classify cost reductions from restructuring as public benefits unless competition n product markets compels the restructuring firm to pass on these benefits to purchasers in the form of lower prices."

He adds that:

"[t]o deny Hume's law is to confuse the efficient allocation of resources with the distribution of income. The authorities

> which administer trade practices statutes should not have to pursue two goals simultaneously." (1988, p11 and p12)

Standard of Proof for Public Benefits

The Commission has stated that it will not accept "mere...assertions and vague claims" (Decision No 201, para 263) as public benefits. Instead, claims should be "reasoned and specific" and there "should be evidence to show that the alleged beneficial effects (specific or otherwise) are likely to happen" (Decision No 208, para 53 (ii)). The Commission has also argued that "[a]t the end of the day...it is the responsibility of the applicant to satisfy the Commission that it should grant the privilege of authorisation" (Decision No 205, para 25).

The requirement that public benefit claims are backed by very good evidence is important for two reasons. First, as Williamson argues, "the data [on efficiencies] is distributed unevenly to the strategic advantage of the defendant" (1977, p 703). Further, as White suggests:

> "[e]fficiencies are easy to promise, yet may be difficult to deliver. All merger proposals will promise theoretical savings in overhead expense, inventory costs, and so on; they will tout 'synergies'" (1987, p 18).

For this reason, Fisher argues that:

> "[t]he burden of proof as to cost savings or other offsetting efficiencies... should rest squarely on the proponents of a merger and here I would require a very high standard. Such claims are easily made and, I think, often too easily believed." (1987, p 36)

It is essential though that the standard of proof for efficiencies be examined in the light of the evidential requirements relating to market power (i.e. dominance and substantially lessening competition). In particular, the test of market power and the test for public benefit need to be struck so as to minimise the total cost of precluding or deterring

efficient business practices and the cost of letting some efficiency-reducing practices slip through the antitrust net. While efficiencies are often hard to demonstrate, there is considerable theoretical and empirical evidence covering the efficiencies resulting from takeovers and mergers and increasing evidence regarding the efficiency advantages of various trade practices. A high standard of proof for public benefit therefore implies that a high standard of proof is desirable for determining whether there is an efficiency-reducing quantum of market power.[7]

This argument has not been recognised by the Commission which has based its evidential onus for dominance/substantially lessening competition and public benefit on a strict legal interpretation of the Act. Unless the standard of proof for dominance and substantially lessening competition, applied by the Commission is sufficiently high to reflect the high standard of proof for public benefit, the standards of proof adopted will tend to bias the Commission's analysis towards the rejection of too many mergers and trade practices.

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7. The implications of this perspective for horizontal merger policy in the United States (where there is no 'public benefit' or equivalent test) are summarised by Schmalensee as follows:

> "Since I hold the consensus view that most horizontal mergers have only a tiny probability of raising prices and that many have positive efficiencies, and since I doubt (perhaps naively) that this consensus is likely to be radically revised in the foreseeable future, I think the law should require more of those who oppose mergers.
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> I am thus comfortable with one core language in the [Reagan] administration's proposal which would require that there be a 'significant probability that the merger will substantially increase the ability to exercise market power'" (1987, p 45).

1.6 Measuring Competitive Detriment and Lessening in Competition

The Commission's discussion of lessening of competition in *Whakatu* implies that the Commission intends to apply a market power criterion in applying both the "lessening of competition" and "competitive detriment" tests. This is consistent with an underlying concern with economic efficiency. However, it is only in the recent *Co-operative Dairy* case that the Commission has expressly adopted allocative efficiency as the criterion underlying "competitive detriment" and "lessening of competition".

The quality of the Commission's principles on competitive detriment and lessening of competition are greatly undermined by its statement that "there appears no limitation as to the nature of... the competitive detriment flowing from the lessening of competition" (Decision No 205, para 25(i)). As with the Commission's express statements on public benefit, such an approach increases the risk that the Act will be used to pursue numerous different policy objectives, the great majority of which are not able to be pursued in a cost-effective manner through competition rules.

Similarly, various trade practices that protect investments in quality and good reputation could be deemed to contravene Section 27 of the Act merely because they raise entry barriers.

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CHAPTER TWO

MARKET DEFINITION - A MATTER OF FACT, COMMERCIAL COMMONSENSE OR ECONOMIC PRINCIPLES?

David Round

2.1 Introduction

Fundamental to any analysis of competition or dominance under the Commerce Act is market definition. Competition takes place within a market, and thus it is essential that the economic boundaries of the market be properly defined, according to accepted economic principles. Market definition in legal proceedings is inherently controversial because, inevitably, economic analysis of the behaviour of firms is critically affected by the delineation of the market in which they operate. Too narrow a market definition will, other things being equal, appear to suggest that there are few constraints on the power of the firm(s) being investigated, and too broad a definition of the market will, at least in the first instance, suggest the presence of constraints which are not in fact provided by market forces.

It is possible, of course, to argue that too much attention is paid in antitrust cases to market definition *per se*. Market definition should be a means to an end, rather than an end in itself. In most cases, the goal is to consider the market conduct of a firm or a group of firms, to assess whether this behaviour runs contrary to the pro-competitive aims of the relevant legislation. To this end, then, the comments of Franklin Fisher (1979, p13) should be kept in mind:

> "Market definition might best be described as the problem of deciding where the relevant group [of products] begins and ends. This turns out not to be an easy task and ... it may be an unnecessary one..."

> "... the primary question in defining a relevant market ought to be that of the constraints on the alleged monopolist. The principal constraints can be of two types, those relating to demand and those relating to supply. The courts have paid appropriate definition to demand and supply substitutability - appropriate because these are criteria by which to judge the constraints on the alleged monopolist. It should not be forgotten, however that it is the constraints which are the object of analysis and not the properties of substitutability themselves".

Fisher is clearly correct. If market definition is to be an aid to antitrust analysis, it must serve to concentrate thoughts on constraints on power. Too great a focus on market definition *per se* will inevitably lead to losing sight of this fundamental fact.

In many cases, market definition is not a matter of dispute - the parties agree on the boundaries of the market in which the alleged behaviour takes place, and the analysis proceeds to investigate that behaviour. However, when there is no agreement between the parties as to the appropriate boundaries, the Court faces a major task in applying the accepted principles of market definition to the actual facts of the case. These principles are well laid out, in both the economics and the antitrust literature. In Australia, the principles of market definition laid down by the Trade Practices Tribunal in the *QCMA* and *Tooth/Toohey's* cases have now been widely endorsed and applied by the Trade Practices Commission, the Federal Court and by practising lawyers and economists alike. These same principles have also been adopted by the Commerce Commission in its decisions in New Zealand under the Commerce Act.

However, market definition has not been without its controversies in Australia. The *Ansett/Avis* merger case provoked considerable discussion as to the appropriate product and geographic boundaries of the market, as did the *Australia Meat Holdings* merger case, where the issue was whether store and fat cattle belonged in the same product market, and also whether various geographically separate abattoirs

could be seen as being equally suitable places to which cattle could be sent for slaughter. A major issue in the *Mark Lyons* case was whether a certain brand of ski boot constituted a separate product market by itself, or whether it was part of the market for all ski boots, or whether it was in the same product market as all kinds of ski equipment, or whether it was in the broader market for all kinds of sporting equipment and clothing. In the *Queensland Wire Industries* case, the High Court of Australia rejected the conclusion of the Full Bench of the Federal Court that there could not be a market for the steel product known as Y-bar, simply because its manufacturer had never sold it to an independent buyer external to the vertically integrated firm which produced it.

In New Zealand, the Commerce Commission has also dealt with numerous cases in which the appropriate delineation of markets was hotly contested. These disputes have been particularly evident in relation to the issue of whether there exists a trans-Tasman market and, on a broader scale, whether New Zealand is part of the International market for traded commodities.[1] Very little opportunity, however, has arisen so far for the Courts to consider the matter of market definition. Only three cases have had to consider this problem at some length - the *Budget* case, the *Compass* case, and the *Tru Tone* case.

In the *Budget* case, the market was defined very narrowly by Barker J., in terms of its geographic dimension, to a "market for rental car services at Auckland Airport". In the *Compass* case, part of the proceedings hinged around whether there was a market for duty free goods at Auckland airport, or whether the market was somewhat wider, geographically speaking. While not attempting formally to resolve the relevant market, Wylie J. observed that duty free shops in downtown

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1. For example, in the Amcor-New Zealand Forest Products merger, in the matter of the sale of shares in Air New Zealand to Qantas, and in the Fisher & Paykel Ltd. attempt to seek authorisation for its exclusive dealing policy in whitegoods, and the subsequent attempt by Email Ltd to buy a parcel of shares in Fisher & Paykel Ltd.

Auckland would subject the airport operator to a "competitive restraint". He clearly saw that a key issue in delineating the boundaries of a market was to include in the market those firms or products which can constrain the ability of the firm in question to exercise a dominant influence in the market. In the *Tru Tone* case, the product, temporal and functional dimensions of the market were defined in a very broad way, to encompass all albums continually released in New Zealand, and to include all functional areas from negotiation with artists right through to retail sale.

All of these cases illustrate the problem noted by Fisher that, while the law requires that a market be clearly delineated, an economist asked to assess the "market" in question dispassionately (as distinct from the "hired-gun" economists who can always produce crystal clear market boundaries, whose breadth will depend on whether the client is the applicant or the respondent in the case!) will almost inevitably produce a somewhat less clear-cut picture than a court might hope for. Short of judges themselves becoming experts in economics, and having the right themselves to cross-examine economists, the problem is likely to be insoluble. Indeed, one could speculate that were ten equally able judges asked to evaluate a given set of "market" data and a unanimous decision were delivered, there would still be delivered ten separate judgements on the market's boundaries!

The *Tru Tone* case, which was appealed to the Court of Appeal, illustrates many of the problems involved in leaving the matter of market definition in the hands of courts with little direct experience in analysing factual market matters according to received economic principles. This paper will, in the next section, briefly discuss the various characteristics of a market which need to be delineated in practice, in the context of the precedents established to date in Australia and New Zealand. It will then analyse the *Tru Tone* decisions, both at first instance and on appeal, in the context of these established principles, to ascertain whether the Courts in New Zealand are proceeding on the

track which has been well established by the Trade Practices Tribunal and the Federal Court in Australia.[2]

The *Tru Tone* decisions are concentrated on in this paper, as they represent the only "completely" evaluated judgements to date on market definition in New Zealand (in terms of having reached the Court of Appeal), and thus will play a significant role, as precedent, in future New Zealand cases needing the judicial delineation of market boundaries.

2.2 Accepted Principles of Market Definition

The Australian Trade Practices Act and the New Zealand Commerce Act provide different legislative approaches to market definition. In New Zealand, section 3(1) of the Act says that market "... means a market for goods or services within New Zealand that may be distinguished as a matter of fact and commercial common sense". In contrast, in Australia, section 4E defines a market as "... a market in Australia and, when used in relation to any goods or services, includes a market for those goods or services and other goods or services that are substitutable for, or otherwise competitive with, the first-mentioned

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2. The author is morally obliged to disclose that he was the economist who gave evidence on behalf of the retailers in this case. The fact that he was on the losing side should not disqualify him from analysing the two *Tru Tone* decisions dispassionately as an economist. Indeed, it means he can provide insights into the facts of the case which are not apparent to a casual reader of the two decisions. A more sympathetic commentary on some aspects of the High Court decision, produced before the release of the judgement of the Court of Appeal, may be found in M Brunt. This analysis, apparently based only on the facts as listed in the decision, is understandable given the way in which the facts were presented in the judgement. Yet Brunt still overlooked the glaring misconceptions and ill-founded statements by the Court, especially in relation to the evidence on substitutability of albums.

goods or services". Clearly, the Trade Practices Act takes a more specific approach to market definition than does the Commerce Act.

In its August 1988 discussion paper *Review of the Commerce Act 1986*, the Department of Trade and Industry in New Zealand addressed the problem of market definition, arguing that an economic assessment of a market is unlikely to differ significantly from that of a business person. It observed that the approach adopted in Australia in the *QCMA* decision has been used in New Zealand by the Commerce Commission and has been commented on favourably in the New Zealand High Court. It argued that while this approach:

> "... reflects the economic broader sense of the term 'market' as defined in the Trade Practices Act it is presumably also consistent with the definition contained in the New Zealand legislation. This suggests that the existing definition is adequate". (pp 14-15)

While it may be true that the use of the *QCMA* principles of market definition were handled correctly in the *Budget* and *Compass* cases in New Zealand, there are many instances in the two *Tru Tone* decisions where it appears that the Courts were unable to grasp these economic principles.

As the Australian Act establishes in s.4(E), the key issue in market definition is that of substitution - on both the demand and supply sides of the market. In the *QCMA* case, the Trade Practices Tribunal defined the issue as follows:

> "We take the concept of a market to be basically a very simple idea. A market is the area of close competition between firms or, putting it a little differently, the field of rivalry between them ... Within the bounds of a market there is substitution - substitution between one product and another, and between one source of supply and another, in response to changing prices. So a market is the field of actual and potential transactions between buyers and sellers amongst whom there

can be strong substitution, at least in the long run, if given a sufficient price incentive. Let us suppose that the price of one supplier goes up. Then on the demand side buyers may switch their patronage from this firm's product to another, or from this geographic source of supply to another. As well, on the supply side, sellers can adjust their production plans, substituting one product for another in their output mix, or substituting one geographic source of supply for another. Whether such substitution is feasible or likely depends utlimately on customer attitudes, technology, distance, and cost and price incentives.

It is the possibilities of such substitution which set the limits upon a firm's ability to 'give less and charge more'. Accordingly, in determining the outer boundaries of the market we ask a quite simple but fundamental question: If a firm were 'to give less and charge more' would there be, to put the matter colloquially, much of a reaction? And if so, from whom?" (p 17,247)

Similar thoughts were expressed by the Tribunal in the *Tooth/Toohey's* matter as follows:

> "... competition may proceed not just through the substitution of one product for another in use (substitution in demand) but also through the substitution of one source of supply for another in production or distribution (substitution in supply) The market should comprehend the maximum range o business activities and the widest geographic area within which if given a sufficient economic incentive, buyers can switch to a substantial extent from one source of supply to another and sellers can switch to a substantial extent from one productio plan to another. In an economist's language, bot cross-elasticity of demand and cross-elasticity of supply ar relevant." (p 18,196)

The definition of market provided in the Commerce Act appears to have been taken from the 1984 Decision No 84 of the Commerce Commission (*Edmonds Food Industries/Tucker*), which was itself apparently derived from the reasoning of the Trade Practices Tribunal and the US Department of Justice's 1982 market definition guidelines. The Commission said that:

> "A market has been defined as a field of actual or potential transactions between buyers and sellers amongst whom there can be strong substitution, at least in the long run, if given a sufficient price incentive. In delineating the relevant market in any particular case there is a value judgement which must be made which involves, for example, an assessment of pertinent market realities such as technology, distance, cost and price incentives; an assessment of the degree of substitutability of products; an appreciation of the fact that a market is dynamic and that potential competition is relevant; and an evaluation of industry viewpoints and public tastes and attitudes. Particularly important in this process is industry recognition (both by supplier and purchaser) and recognition by the consumer. Ultimately the judgement as to the appropriate market - and its delineation by function, product and area - is a question of fact which has been made on the basis of commercial common sense in the circumstances of each case."

From these definitions, it can be seen that a market has several dimensions. These dimensions include product, geographic area, function, and the temporal aspect. As well, some cases involving market definition have embraced the notions of sub-markets, primary and secondary markets (which are an extension of the functional dimension of a market), and second-hand markets. These last three dimensions of a market were not at issue in the *Tru Tone* decisions, and so will not be

discussed further in this paper.[3] The formal justification and measurement procedures for the first four dimensions have been spelled out in detail in numerous other places and cases and will not be repeated here.

2.3 The Tru Tone Decision in the High Court

The decision in the High Court appeared to be based on a misunderstanding of the essential principles of market definition, especially compared with the analysis in the *Budget* case. In the key dimensions of product, function and temporal framework, the High Court's analysis was analytically deficient.[4]

The facts of the *Tru Tone* case were complicated, but basically concerned the use by Festival RML Limited of a system of maximum retail pricing of Top 50 albums (albums which were in high demand during their charting period, and for which there were no substitutes at all, in the minds of at least a distinct group or series of groups of the album buying public), and the enforcement of this price by means of refusals to supply key retailers who chose to charge prices in excess of the stipulated price (in order to finance extra services provided to their customers). There was evidence that the defendant did not cut off supplies to all retailers who were charging in excess of the stipulated price, but only refused to supply a few selected leading retailers, presumably to demonstrate to other retailers what would happen if they

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3. It is possible, in retrospect, that the plaintiffs might have successfully argued that each album was a sub-market in a more broadly defined album market, although there is declining support internationally for the concept of sub-markets.

4. There was little real dispute between the parties on the geographic aspect of the market, and no further reference will be made in this paper to this dimension of the market.

did not comply with the supplier's wishes.[5] It was claimed by Festival RML that it chose to market its Top 50 albums on an agency ('sale or return') basis, with a stipulated maximum price, as part of an overall marketing strategy designed to sell more records and to ensure that it paid the "right" royalty payments to its contracted artists.

The Product Dimension of the Market

The product dimension of the market was hotly disputed by the opposing parties. Reference was made by the retailers to a considerable number of Australian, American and European cases in which the concept of a single product market had been accepted. Among such markets were individual computer systems, Johnnie Walker scotch, Guerlain perfume, championship boxing matches, green bananas, branded cash register spare parts and tampons.

Festival RML had argued that the product dimension of the market should encompass, at a very minimum, all Top 50 albums. The retailers, in contrast, argued that each individual chart ranking album constituted a separate market, as it was estimated that some two-thirds to three-quarters of all customers who entered their shops asked for a particular album by name, and would not substitute any other album for the requested one. Thus, for the period in which an album was ranking highly in the charts (some 4 to 10 weeks on average) there were <u>no</u> substitutes for a particular album. In the words of the *QCMA* test, if Festival RML, or the retailers for that matter, did 'give less and charge more', only a very small number of buyers of RML albums would switch to another album. In addition, on the supply side, no other album

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5. That certain albums were indispensable to retailers was shown by evidence that retailers who were refused supply, either by the defendant for the reasons at issue in this case, or as part of the normal commercial measures taken by album suppliers to bring slow paying retailers into line, responded by buying supplies of the restricted albums at full retail price from other retailers, in order to keep faith with regular customers.

distributor could produce a close substitute for any particular album, because all artists are under medium to long term contracts with their record suppliers, and it is not possible therefore for any other supplier to duplicate the album.

The evidence provided by the plaintiffs that when an album is charting well, a sizeable percentage of popular album buyers will want that album and will not be prepared to substitute another one for it, was accepted by the High Court. However, it concluded that:

> "... in view of the short average time that such an album remains popular we see the albums which displace it in the chart ratings as clear substitutes. And it is clear from the evidence that at any one time when an album is enjoying popularity, promotion of another is gathering momentum. In our view the places at the top of the charts are a constant battle ground in which rivalrous conduct abounds."(p 103,089)

While the High Court was not prepared to find a series of single product markets, if buyers will not substitute one album for another, then albums as a group cannot form the product dimension of a relevant analytical market. The authorities are unanimous in invoking substitute on the demand side (i.e., substitution in use from the perspective of the buyers) as the key to the delineation of the product dimension of a market. In fact, the High Court quoted the extract from the Commerce Commission's decision in the *Edmonds/Tucker* matter referred to in the previous section, and indeed itself underlined the passage:

> "Particularly important in this process [of market definition] is industry recognition (both by supplier and purchaser) and recognition by the consumer." (p 103,089)

Yet the Court refused to recognise consumers' buying habits as they related to individual albums. The Court in effect found only that no one album producer was guaranteed a place in the sun for any particular period of time for any of its albums. It confused an analysis of dominance, which was one of the causes pleaded, with the definition of

the relevant market. It is true that the two concepts are interdependent, but on-going substitution over time on the charts does not indicate substitution by the particular discrete groups of buyers who are committed fans of particular artists. Unlike the goods traded in 'normal' product markets, which are reasonably homogeneous over time, changing in quality or other characteristics very gradually, different albums are quite discrete or unique products, limited in appeal to particular groups of buyers.[6]

It appears that the High Court was misled by the phenomenon of the Top 50 charts. These charts in themselves do not constitute a market, as was apparently believed by the Court. They are simply a weekly compilation in which albums are ranked according to the number of sales achieved in each particular week. The compilation of the charts and the movements by albums therein have nothing whatsoever to do with whether albums are substitutes or not. When an album falls in the charts, this does not indicate that any other album is being substituted by the relevant pool of buyers for that particular album. Fans of the artist(s) featured on the album may not be buying other albums as substitutes. It simply indicates that the absolute demand for this particular album is falling. To infer a substitution relationship between two albums simply by virtue of their relative movements on the charts is quite erroneous. The decision-making process of a typical Top 50 album buyers is not "Shall I buy album A or album B?", but rather "I want this particular new album."[7]

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6. While the bottlers of Coca Cola have fiddled with its formula (with varying degrees of success) over the years, the product is still identifiable as Coke, is similar to rival Colas, and will appeal to most cola drinkers. The same cannot be said for individual Top 50 albums.

7. It is clear that the retailers made a mistake in not commissioning a survey of customer attitudes as to the substitutability of Top 50 albums, and in not being able therefrom to try and estimate formally the cross-elasticities of demand between various album pairs. The plaintiffs did provide the results of a 1978 survey of customer attitudes (it being regarded as accepted that the attitudes of record buyers in 1987 were no

The Temporal Dimension of the Market

Competition should always be analysed in the long run. With some products in some markets, appropriately defined, the analytical short run could be very brief indeed, with even the long run occupying a quite brief period of real time. The album retailers argued that the analytical long run for record distribution and retailing could in fact be only a matter of some weeks. The High Court did not accept this distinction, confusing a short run real time period, measured in an absolute or commercial sense, with the analytically correct distinction between the short run and the long run.

The High Court concluded that the time in which the defendant's albums were on the Top 50 charts was too short in general to qualify as any form of dominance. The Court clearly believed that there was some absolute minimum time period which could constitute the temporal boundary of a market. There is no basis in economic theory for such a conclusion. Market delineation is always a question of fact. Each market must be assessed on its own facts, and in particular with regard to the decisions of buyers. If the decisions of buyers whether to buy or not to buy a product take place within a relatively short period of time and are not repeated over time as part of a normal purchasing pattern (as is the case with, say, soft drinks, batteries or holidays), then it is a sound economic and factual conclusion that the demand for each album and consequently, the temporal boundary of each of the individual album markets, is of limited duration. There are many markets which are

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different from those of a decade earlier), as well as the retailers themselves providing considerable evidence that their customers wished on any one occasion only to buy a specific album and that customers tended to be insensitive to a range of some three to four dollars (i.e. as between different retailers) in the price of a specific album. All of this evidence was virtually ignored. It would appear that in future cases, litigants should be wary of basing their submissions on "qualitative" expressions of substitutability from those selling to the public.

temporally limited, and experienced by most consumers, including Bluff oysters, Christmas decorations, ski gear, greeting cards and seasonal fruit. It should be noted that some of these markets are temporally limited by supply factors, others by demand considerations.

Albums released later in time, which achieved similar levels of popularity, were seen by the Court as "clear substitutes" to those previously released. How this could be the case when the future release of such albums was not known by the buyer at the time of making a decision to purchase, was left entirely unexplained. Similarly, albums released at some time in the past and no longer on the charts, or declining in popularity on the charts, would not enter the current decision making process of the buyer, because the buyer would previously have had the opportunity to consider purchasing that albums, and would either have already bought it, or have decided then that it did not interest him or her.

The High Court also showed its inability to distinguish between the general notion of a firm's business and the proper analytical concept of a market when it stated that:

> "... the New Zealand album market ... encompasses both the distribution and retail aspects of the industry and is in a sense ongoing and self perpetuating and not in any sense confined to the brief life of any one album." (p 103,090)

This approach by the Court involved collapsing a series of distinct analytical markets, which happened to be relatively brief in real time, into one analytically inappropriate market. The reason for this appeared to be a consequence of the Court's equating the analytical concept of a market with the business activities of the album distributors. By equating market with business, the Court appears to suggest that only markets which constitute chronologically continuing commercial activity will be recognised. The Court went on to say that:

> "... in reality, no distributor or retailer could run a business on the basis of a market confined to one unique album. None of

them do and as a matter of commercial common sense none of them could". (p 1013,089)

This is, of course, correct, as a matter of commercial necessity. But it does not follow that because a firm deals in several products, that they all belong in the same analytical market. If the High Court's line of reasoning were followed it would mean that, for the purposes of analysis, markets would be hopelessly diffused and confused, extending horizontally and vertically to embrace an enormous range of non-substitutable products and production processes.[8]

The Functional Dimension of the Market

The fusing of temporally separate markets into one was accompanied by both the High Court and the Court of Appeal fusing the separate functional levels of the market into one broad functional market. The Courts were unable to see that the practical identification of the functional level of a market requires an examination of the identity of the buyers and sellers doing business with each other at the successive stages of manufacture, distribution and final sale. In the recording industry, the first functional level involves recording artists, as sellers, negotiating with the recording companies as buyers for contracts. The next functional level is where the recording companies manufacture, and distribute, as wholesalers, albums to retailers. The third functional level is where the retailers then sell albums directly to the public. The buyers

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8. A hardware store sells items as diffuse as nails, paint, taps, toilet cisterns, tiles, slate, cement and grass seed. In getting supplies, the owner deals with numerous different manufacturers, who are not in competition with each other, and sells to quite different groups of buyers (a person who walks into the store wanting a can of paint will not substitute a bag of cement for it) and competes with general hardware stores and specialist retailers of some of these products. The retailer operates simultaneously in numerous different markets, with different groups of buyers and sellers.

and sellers will be different at each functional level, and therefore one could expect different patterns of competition to exist at each functional level. However, the High Court, at a minimum, fused the last two functional levels just mentioned into one functional market, thereby confusing the analytically appropriate concept of a market with the concepts of industry and business.

The Court confused its analysis of the behaviour of Festival RML with the analysis of the markets within which this firm operated. Festival RML argued that its marketing strategy, including the agency agreements, was an alternative to formal vertical integration - it was a more efficient way of achieving its desired goals. In the process, of course, the retailers became subservient to the distributor - unable, as independent businesses, to formulate their own independent commercial strategies. It was almost as if they had become franchisees (Brunt characterises it as "an informal franchising arrangement" (p 26)), but in fact they were unwilling franchisees, upon whom a new method of selling had been enforced by a monopoly supplier of albums which were vital for their commercial well-being. "Sale or return" as a form of retail selling is not unique to Festival RML's albums. It is a strategy employed by other album distributors and is widely used in the retail trade generally.

Festival RML obviously wished to suspend the process of market co-ordination to suit its own purposes, and had the market power to do so. Its products were necessary for the survival of album retailers, and they were unable to react through the market to Festival RML's actions in giving less and charging more, because there was no alternative source of supply. The fact that the other album distributors had not chosen to operate in a similar way indicated that Festival RML's actions were not compulsorily dictated by any greater efficiency being obtained through the replacement of market transactions with what effectively amounted to internal co-ordination by a monopoly supplier against the wishes of independent commercial entities. Rather, Festival RML appears to have realised it possessed market power and was able to act unilaterally, effectively constrained by no rival seller and by no retailers, to take advantage of its discretionary power.

There undoubtedly is competition between the recording companies at the first functional market level, where they seek to outbid each other for the rights to negotiate lucrative contracts with various recording artists. But the fact that they behave competitively at this functional market level at irregular intervals has nothing to do with their behaviour as sellers in a subsequent functional market. Indeed, a market is not the same thing as the business of a firm. The term "business" encompasses the scope of operations of a firm. While a firm's operations might be limited to a single market, most businesses, particularly in retailing, deal in a diversified range of products. They sell these products to different groups of buyers in a variety of different markets and in the process face a variety of different competitors in each market. The implication that the market must as a minim equate with the scope of the business, which the High Court suggested (p 103,089), illustrates the extent of the error in reasoning which arises from a failure to consider the identities and behaviour of the buyers and sellers at each separate functional level. There is no logical reason why the operation of a business should be restricted to a single market, nor why the delineation of a market should be as extensive as a business. There is no precedent in the Australian cases for the approach to market analysis adopted by the High Court.[9]

The Court of Appeal also dismissed the contention of the retailers that three analytically distinct functional markets were involved, saying that "In our view that kind of separation is wholly artificial". (p 103,293). Clearly, both Courts confused badly the scope of Festival RML's commercial activities with the analytical markets within which it operated.

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9. The High Court not only believed that it was inappropriate to separate the "licence acquisition" and the wholesale/distribution functional markets because of the competition between the recording companies for artists, but also believed that because the promotion of albums to the public was done mainly by the album distributors, there was no reason to divorce the retail market from the distribution market.

Summary of the High Court's Judgement

The High Court seemed to be reluctant to explore fully the complex set of market relationships to the extent necessary to provide a well reasoned definition of the market. This is nowhere better illustrated than in its statement that:

> "A number of the cases referred to us envisage an almost ritualistic approach to the question of the definition of the market. The market we are dealing with here, however, is somewhat out of the ordinary." (p 103,090)

So, despite an acceptance of the fact that "... authorities all emphasise the necessity for a careful definition of the market in cases where anti-competitive conduct is alleged" (p 103,088), the High Court then spent little time formally following the rules and precedents laid down by these authorities, compounding this by adopting an inappropriate approach to the question of dominance. The High Court also confused the process of market definition with characteristics of the competitive process. Competition is a dynamic process of rivalrous interactions, substitution and market restraints. The Court fell into the trap described by Fisher, and failed to consider properly the existence of such restraints applying at each of the appropriate stages of market delineation.

2.4 The Judgement of the Court of Appeal

The Question of Substitutability

The Court of Appeal refused to analyse this case on anything other than its own facts. It would not consider the multitude of cases from various jurisdictions which were presented to it. The Court stated that

> "... we are satisfied that this case falls for decision essentially on its own facts. <u>It would not, in our view, be helpful to attempt to lay down general principles</u> or to decide any matters in

> interpretation of the legislation which do not require decision for the purposes of this case." (p 103,291, emphasis added).

By refusing to consider the basic economic principles underlying the task of market definition, the Court of Appeal was left without an analytical framework. By looking only at what a business does in a descriptive rather than analytical sense, the Court essentially misinterpreted the facts. It noted correctly that:

> "The identification of the relevant market is the first step towards the assessment of the current state of competition and of the nature and extent of any inhibition of competition. At each step it is a practical jury question of fact and degree." (p 103,291)

However, that question of fact must be analysed within the appropriate economic framework. After referring to the definition of a market as spelled out by the Commerce Commission in the *Edmonds/Tucker* decision (the only authority on market definition referred to in the judgement), the Court of Appeal said:

> "In focusing in the definition in s 3(1) on distinguishability as a matter of fact and commercial common sense the legislation has carefully avoided giving prominence to any particular criteria. <u>In particular, the test is not substitutability as such, although that would ordinarily be an important consideration;</u> and, as recognised in the passage cited, 'market' is ordinarily regarded as a multi-functional concept with dimensions of product, functional level, space and time." (p 103,292, emphasis added)

The Court of Appeal clearly has not understood the essential ingredient of market definition - substitutability both on the supply side and, perhaps more importantly, on the demand side. This has featured in all of the major Australian and New Zealand decisions to date, and clearly is the cornerstone of the definition of a market in the Australian Trade Practices Act. One may well ask, if the test is not substitutability as such,

then what is the particular criteria which must be focused on, in determining the boundaries of a market? The Court of Appeal has given no guidance here, and has opened up a Pandora's box for future cases, at least as far as market definition is concerned. Given the advent of CER and the prospect of harmonisation of business laws between Australia and New Zealand, it is inconceivable that one of the basic concepts of a competition statute should be capable of fundamentally different interpretations by the Courts in both countries. As Wilcox J. said in the *Mark Lyons* case in Australia,

> "[t]here will always be a question of fact whether the relevant market is confined to a single product or brand of products. The test is substitutability." (p 48,797, emphasis added)

He went on to say that a single product market could exist if the product was "... so distinctive as to be free of effective competition: (p 48,798), and suggested that the test of distinctiveness was that the good should be "insensitive to price competition from other brands." (p 48,799).

Acceptance of the Australian approach has been make by at least one New Zealand judge. Mr Justice Barker, in his decision in the *Budget* case, said:

> "... the reference in the Act to commercial common sense (as distinct from any other kind of common sense) as the yardstick by which to determine a market is another and more straightforward way of articulating the Australian definition. The matters in the Australian definition must enter the Court's assessment of "fact and common sense". The assessment must be made from a consideration of the composition of and the forces in the market. ... I should have been sorry to have reached an opposite conclusion and to have held the cases on the Australian definition inappropriate ..." (p 103,060-061, emphasis added)

The High Court in the *Tru Tone* case acknowledged this statement in its judgement (at p 103,088). Yet while Barker J. clearly understood the

factors which characterise the process of market definition, and was willing to use the Australian precedents[10], it was clear in the two *Tru Tone* decisions that the Courts were not prepared to embrace the tough analytical steps which underlie market definition, nor were they prepared to define the market in accordance with clearly defined Australian and overseas precedents.

On the matter of product market definition, the Court of Appeal argued that in finding against single product markets it was not rejecting any recognition in appropriate cases of single product markets. It simply argued that the special factual basis of each previous single product market decision rendered pointless any comparisons between the album market and these other cases. With respect, it seems that the Court of Appeal had not sufficiently addressed the theoretical issues underlying market definition in sufficient detail to be able to make such a sweeping dismissal of these other cases.[11]

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10. This remark should not be interpreted to mean that the author is in agreement with Mr Justice Barker's factual findings on the various dimensions of the rental.car market. It simply indicates that he carefully proceeded through the various analytical dimensions of a market, in coming to his findings.

11. In this context, it is interesting to note the Advisory Opinion of the Competition Committee No. 52 and Ministerial Decision No. K6-447 in Greece, issued on 10 August 1987. Here it was found that an attempt to stop cheap Greek made records being imported to other EEC countries represented an abuse of a dominant position by the three record companies involved, this position being derived from the exclusive manufacturing, trade and performing rights which they held under licence. The decision takes the view that holding the exclusive rights on the work of one or two popular singers amounts to having a dominant position in the market both severally and jointly with others having similar rights to music work of some other popular singers.

The Functional and Temporal Boundaries of the Market

When it did attempt to define the temporal boundaries of the market in its own words, the Court of Appeal characterised the retailers' argument as follows:

> "Viewed in relation to product and time the single album definition of market ignores commercial realities. It focuses on short run phenomena. It presents a snapshot rather than a moving picture of continuing commercial activity." (p 103,293)

The Court of Appeal, like the High Court, was clearly impressed by the fact that the recording companies had to compete vigorously to secure the services of the artists. Because of the fusion at functional levels, each Court then felt comfortable in concluding that if the market was competitive at one level of negotiations, then this must flow through to the rest of the market. In particular, both Courts accepted that the need to ensure record sales were high enough to make the necessary royalty payments to artists, required a high degree of skill and marketing success and that the recording company was entitled to dictate retail marketing procedures to suit its own particular goals. Both the High Court and the Court of Appeal saw no room for album retailers being left free to formulate their own independent commercial selling strategies. As an illustration of the Court of Appeal's lack of ability to grasp the need to separate the various functional levels of the market, one need only consider the acceptance by the Court that it was in order for an album manufacturer to seek to maximise its sales by developing an "overall trading plan" to suit the manufacturer, imposing on retailers a pricing strategy which clearly did not coincide with what the retailers judged to be in their own best commercial interests.

The Court of Appeal fused separate temporal markets and separate functional markets badly. It had no feel for the proper analytical approach to market definition. Nowhere is this better illustrated than in the Court's response to the plaintiffs' arguments that there were three

appropriate functional market levels. Because Festival RML was competing with other distributors both for the acquisition and retention of rights to artists, and because Festival RML was thought to be competing with other distributors in the promotion of labels, artists and albums, the Court of Appeal believed that there was only one broad market. If this approach were to be applied widely it would have the result that all business activity would be analysed in terms of a vertical jumble of unrelated functional activities.

Although no reference was made to the *Tooth/Tooheys* formulation of the principles of market definition, it is possible that both the High Court and the Court of Appeal misunderstood what the Trade Practices Tribunal had in mind when it said:

> "The market should comprehend the <u>maximum range of business activities</u> and the widest geographic area within which, if given a sufficient economic incentive, buyers can switch to a substantial extent from one source of supply to another and sellers can switch to a substantial extent from one production plan to another." (p 18,196, emphasis added)

It is clear that the Tribunal had in mind, when speaking of the "maximum range of business activities", the horizontal extension of commercial activity, rather than the vertical extension of business dealings through successive functional levels of the market. While a decision that the product dimension of the market was all Top 50 albums on the Chart at any given moment of time could be argued from an analytical perspective, at least in theory, the fusing of several functional levels is clearly inconsistent with all of the Australian and New Zealand precedents. Despite the clear message in the precedents that the different functional levels of a market could be analytically distinct, the Court of Appeal could only assert, without any cogent supporting reasoning, that "[i]n our view that kind of separation is wholly artificial."

The Court of Appeal and the Competitive Process

It must be said that both Courts handled other economic aspects of the case poorly, besides market definition. In particular, they appeared not to understand at all how the competitive process worked. To illustrate how much at odds the Courts were in the *Tru Tone* case with general thinking on competition, consider the following quotation from the Trade Practices Commission's May 1988 Statement *Objectives, Priorities and Work Program for 1988-89*:

> "The Commission will actively pursue abuses of market power which severely affect the competitive process ... Market activity which inhibits entry or eliminates price flexibility is especially important ..." (emphasis added).[12]

This notion of competition was not shared by the Court of Appeal. In relation to the imposition by Festival RML of a maximum retail price (despite the evidence that there was vigorous competition between retailers and the fact that each would need to compete for such things as location), the Court concluded that

> "... in a real sense RML's price ceiling is pro-competitive in that it provides a check on retailers who through location or otherwise have less competition-induced constraints over the prices they charge.
>
> To put it another way, there is a real prospect that without maximum pricing stipulations retailers in this market will not pass RML's costs savings on to the public." (p 103,296)

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12. It is true that some economists, notably those of the Chicago school, regard price inflexibility flowing from vertical price restraints (resale price maintenance) as welfare-enhancing. The debate is far from settled as to which school of thought is correct.

The Court's understanding appeared to be that, in a retail market where it was agreed by all parties that entry was easy, market forces could not be relied upon to correct any anti-competitive behaviour which might emerge. This indicates a profound misunderstanding of the competitive process, a confusion between something which is pro-competitive and something which is a replacement for competition. The Court's preferred position appears to be to permit a monopoly supplier of unique products to impose its own preferred form of regulation on the market, to achieve a different result to the competitive process. This seems contrary to the spirit, and the letter, of the Commerce Act. The Act should not be used to justify the private regulation of a previously competitive market by a firm solely for the furtherance of its own interests, at the expense of other firms in the market and to the detriment of consumers.

2.5 Implications of the Tru Tone Judgement

CER and the Courts

In a paper on "Harmonization of Business Laws - The Implications of CER", Professor R. Baxt, the Chairman of the Trade Practices Commission singled out the Court of Appeal's decision in the *Tru Tone* case

> "... as an indication of how the approaches in the two countries may well differ in a significant way in evaluating evidence, the weight to be given to that evidence by the members of the court, and the way in which economics will be treated in two courts." (p 17)

In the context of CER and the harmonisation of business laws, he went on to say "I think this is an area of quite considerable importance and we will need to see a concise and sensitive evaluation of the differences between the Courts in the two countries".

It is clear that the legal profession in New Zealand also is not happy with the approach to market definition taken by the Court of Appeal. In

its submission to the Department of Trade and Industry's review of the Commerce Act, the Auckland firm Russell McVeagh McKenzie Bartleet & Co recommends that:

> "... the definition [of a market] is clarified to ensure that substitutability is the key criterion in determining market definition." (p 5)

It quoted a passage from the Court of Appeal which included the statement that "... the test is not substitutability as such...", and went on to argue that clearly

> "... the Court of Appeal does not attach the same importance (unlike the [Commerce] Commission and Australian Trade Practices Commission & Tribunal) to the substitutability concept in determining market definition. For this reason we consider that the definition must be clarified and we would endorse the Australian definition of a market. Also, we consider that it would have the advantage of achieving uniformity between Australian and New Zealand laws."(p6)

It is easy to see how such discrepancies could emerge. Following the definition of a market as a matter of fact and commercial common sense, Barker J. in the *Budget* case claimed that this

> "... makes the defining of a market a "jury question". The Judge must make his assessment aided by the evidence, including the expert evidence." (p 103,065)

This approach was endorsed by the Court of Appeal, when it said in the *Tru Tone* case that:

> "The identification of the relevant market is the first step towards the assessment of the current state of competition and of the nature and extent of any inhibition of competition. At each step it is a practical jury question of fact and degree." (p 103,291)

This jury approach, of course, is not the case in Australia, where the main criterion for market definition is spelled out precisely - that of substitutability. If the New Zealand test "... is not substitutability as such, although that will ordinarily be an important consideration" (Court of Appeal, p 103,292), then it may not be wise to expect consistencies in market definition on both sides of the Tasman. If uniformity in market definition is not achieved, major differences will doubtless emerge between Australia and New Zealand in the identification of markets, with the result that discrepancies could emerge in the evaluation of competition within a market, especially in the trans-Tasman context of mergers, and this could make difficult the development of a unified trans-Tasman competition law.

The Australian approach to market definition provides an analytical framework; the New Zealand one does not. In New Zealand it is left to the Court to determine what it thinks is the correct framework and judge the facts accordingly. This is bound to lead to inconsistencies in approach and findings, depending on what judges perceive to be commercial common sense, especially considering the lack of conceptual economic expertise in the New Zealand Courts. Even in Australia, some 15 years after the Trade Practices Act was passed, there is still concern that the Federal Court cannot at times cope with economic analysis. Thus, as the Trade Practices Commission has stated in its recently released *Annual Report 1987-88*, it is concerned

> "... at the role played by courts in the evaluation and adjudication of matters relating in particular to part IV of the legislation, and more specifically to provisions which contain a competition test. The history of trade practices legislation in other countries, as well as in Australia, suggests the courts may not be the most effective forums in which to evaluate marketplace laws such as the Trade Practices Act ... it may be necessary to establish a different forum if, over a period of time, the courts prove unable to respond effectively to the challenges which have been given to them in dealing with these issues." (p 4)

Constraints on Power

Along with Fisher, there are many economists who now believe that the matter of market definition has been allowed to overshadow the main area of importance in matters involving questions of competition and dominance, which is whether there exist any significant restraints on the market power of firm(s) under investigation. Had the two Courts in New Zealand followed this approach, they would have likely been forced to consider whether Festival RML was in fact able to price its Top 50 albums without any regard to the prices recommended by other album distributors, and whether retailers were able to constrain the pricing, marketing and distribution policies of RML in any significant way. As it was, the Court implicitly assumed the presence of such constraints, without asking the pertinent questions.

2.6 Conclusion

Market definition is a fundamental part of any analysis of competition and dominance. It provides the analytical framework within which the behaviour of firms and the constraints within which they operate, may be assessed. It will often be controversial, but it will never be determinative of an issue, if it is done according to sound economic principles and if all relevant aspects of market structure and conduct are considered in the subsequent analysis.

The New Zealand Courts have been left to establish their own interpretation of the term market, in comparison with the guidance given to the Federal Court in Australia by the Trade Practices Act. Legal minds often find it difficult to grasp, on first acquaintance, the principles underlying fundamental economic concepts like market, substitutability, competition and market power. At this stage, based on the two *Tru Tone* decisions, the economic jury can at best remain undecided on the ability of the Courts in New Zealand to handle satisfactorily the conflicting economic arguments which are an inevitable feature of competition cases.

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CHAPTER THREE

AN ECONOMIC FRAMEWORK FOR MERGER ANALYSIS IN NEW ZEALAND[1]

Benjamin Klein and Thomas Campbell

In conducting our investigation of the proposed Fletcher Challenge/NZ Forest Products acquisition, we examined the facts within a general theoretical economic framework. To better understand our conclusions, we present this general framework. We then present the specific features of the New Zealand economy which we consider relevant in applying this framework to the New Zealand context.

3.1 General Economic Framework

Our general economic framework is that competition can best be viewed as a process rather than as a particular organisation of an industry. As a process, competition refers to an attempt to best one's rivals. In a capitalist economy, where consumers are free to choose among the goods of various producers, competitors succeed in proportion to their ability to provide the goods consumers want at prices lower that those offered by their rivals. Competition, in this sense, does not depend solely upon the number of firms in an industry. Even a "monopolist" realises that consumers find his goods more or less

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1. This is an excerpt from a report prepared by Economic Analysis Corporation in 1987 on the proposed acquisition by Fletcher Challenge Ltd of NZ Forest Products Ltd. We wish to thank Ray Kennedy of EAC, Stephen Jennings of Jarden Morgan and Mark Berry of Bell Gully Buddle Weir for assistance in preparing the report.

substitutable for the products of other producers.[2] The alternative definition of competition, as a particular organisation of industry, most frequently refers to an idealised model where the industry consists of many small producers of an entirely homogenous good. Such a model is useful for classroom purposes, but is clearly misapplied if it is used as a guide to the "ideal" structure to be imposed upon an economy through public policy. Instead a reasonable policy goal is to seek to preserve the process of competition (sometimes referred to as "workable or effective" competition) without foregoing the efficiency benefits often obtainable only through large business organisations.

The view of competition as a process is entirely consistent with the discussion of competition in *QCMA*. We understand that the *QCMA* approach has been adopted previously in New Zealand by the Commerce Commission and High Court. In an antitrust context this view of competition is validated by the absence of an empirical relationship between the number and shares of firms in an industry.[3]

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2. See Schumpeter (1962), for a description of the dynamics of the competitive process.

3. The charges in US merger policy were undoubtedly influenced by developments in the field of industrial organisation. Since Bain's 1951 article, economists have devoted considerable effort to analyzing the empirical relationship between market structure and industry performance. However, the early studies suffered from very serious methodological and data problem. Many of these studies found a positive correlation between market concentration and average profitability. As Harold Demsetz has pointed out, the correlation may have nothing to do with the exercise of market power or collusive behaviour. Innovative firms that discover superior products and/or lower cost production processes are rewarded both with higher profits and market shares in competitive markets. Because the relative importance of this innovative behaviour differs across industries the result of this process may be a cross-sectional correlation between industry concentration and profitability. Industries where leading firms have made substantial product or cost innovations will tend to exhibit

Consistent with our understanding of New Zealand law and current American antitrust policy, the appropriate focus is on consumer welfare. Mergers which result in no consumer welfare loss are to be allowed, and those which result in gains in consumer welfare are to be encouraged. More specifically, Section 66.8 of the 1986 Commerce Act requires that authorisation for a merger or acquisition be granted if a public benefit outweighs or would likely outweigh the public detriment resulting from a party acquiring or strengthening a dominant position in a market.[4] The term "consumer welfare", as we have used here, is actually an economic term of art. Specifically, we use the term to refer to the benefits consumers receive from being able to buy the goods they want, in the qualities and quantities they desire, at the lowest prices.

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higher concentration and profitability. Demsetz provides empirical support for this view by demonstrating that the profitability of non-leading firms is unrelated to industry concentration. This contrasts with the collusion hypothesis which predicts that higher concentration should raise the returns of all firms in the industry. He concludes: "[T]hese data fail to provide evidence that collusion in the absence of super performance is easier or more successful in concentrated industries than in unconcentrated industries" (Demsetz, 1973, p21).

4. In the Justice Department Guidelines, the "clearance" and "authorisation" steps are effectively combined and public benefits (efficiencies) are considered in every case. Both procedures lead to the same effect. If the matter reaches the courts, however evidence of efficiencies obtainable through the proposed merger frequently are considered as an indication of an absence of anti-competitive intent. This represents, in our opinion, a (not necessarily undesirable) hold-over from the earlier criminal justice approach to anti-trust.

The evil that the antitrust laws are designed to prevent is the acquisition or strengthening of market power. This might involve the power to increase the product price above competitive levels (monopoly power) or to depress the price of an input below competitive levels (monopsony power). Monopoly and monopsonistic power will only arise when there are not restraints imposed by present or potential competition, either domestically or from abroad. In general, even an unrestrained monopolist would still find it in his own interest to provide the public with the goods in the quality, quantity and variety that consumers desire, at the least cost of production.[5]

In analysing a hypothetical merger involving firms, which through legislation or otherwise were protected from other new domestic competition and foreign rivals, one may look at the combined market share of the proposed merger partners and the concentration of the industry generally. The economic reasoning for considering market shares is not too subtle. It is presumed that as the industry composition shifts towards fewer and larger firms, the remaining firms or some

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5. An evil which is sometimes attributed to monopoly is that monopolists tend to serve their customers less well (in quality and variety of products), and to be internally inefficient. The argument is that without exposure to the discipline of the market, a sloppy or inefficient firm can survive; under competition it would not. This is probably true, but failing to serve customers will or produce efficiently results in a loss of profits. A profit-maximising monopolist will offer consumers the goods they want in the quality and variety they demand, only at a price which is too high relative to competitive standards. Inefficient operations or indifference to customer demands will result if the owners are unconcerned about profits (the most notorious examples being government enterprises) or too distant from the actual management to adequately control it. See Alchian and Demsetz (1972), for a discussion of how the firm's organisation might or might not lead to profit maximisation.

subset of them having a large collective market share will be able to collude either explicitly or tacitly to reduce their output and increase prices, to the detriment of consumer welfare or to reduce their use of input and lower its price, to the detriment of input suppliers.[6] Thus, an examination of numerical measures of market concentration is not wholely unjustified in antitrust analysis.[7]

However, consistent with American practice, a consideration of numerical measures alone is not sufficient. Rather, an assessment of the scope for market dominance requires a consideration of the market factors (both actual and potential) which act to constrain incumbent firms. This requires an examination of all the market responses which would result if a firm attempted to "give less and change more". These responses by other firms and consumers include imports, new domestic entrants, switching of production from export to domestic markets, changes of geographic sources of supply within the home economy and

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6. Analysis of the costs and benefits of explicit or implicit collusion has generated a substantial literature in industrial organisation. The primary impediment to successful collusion is the fact that although it is in the interest of the manufacturers as a group to restrict their output below the competitive level in order to raise the price, any individual firm has the incentive to expand its output and "free ride" on the high prices caused by its rivals output reductions. These problems cause collusive arrangements to be inherently unstable.

7. In addition to the number of sellers and the degree of market concentration, economists have identified several other factors which affect the likelihood and success of collusive arrangements among producers. Effective collusion is thought to be less likely the more heterogeneous the products are, the higher the ratio of fixed costs to total costs, the more infrequent and "lumpy" typical product orders are, and the greater the extent of excess capacity in the industry. An important paper in this literature is Stigler (1964). See also Scherer (1980).

consumers switching to competing firms and products.[8] Any of these influences may leave even a sole domestic producer with no market power and no ability to affect prices.[9]

It is sometimes suggested that monopoly power can be achieved by driving out or excluding competitors by, engaging in predatory pricing, or by removing a competitor at one horizontal level by cutting off their supply of a critical input.

Predatory pricing has attracted a substantial amount of scholarly attention. The literature focuses on a hypothetical scenario where a firm

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8. Just as consumers invariably have substitutes available (butter for margarine, etc), producers have alternatives as well. Certainly, prices cannot be driven below the average.

9. The importance of potential competition for the behaviour of incumbent firms has attracted considerable interest in the recent literature. The literature on "contestable markets" of William Baumol (1982) and others demonstrates that under certain cost conditions an industry with only one current supplier may be forced by the threat of entry to price at the competitive level. The widespread acceptance of the powerful constraining effect of potential entrants on incumbent firm behaviour is also evident in the commentaries of people currently shaping US antitrust policy: (Easterbrook, 1986, p 19).

> "If a practice produces monopoly profits, the firms using it ultimately lose their positions to those offering consumers a better deal...Erosion may take a long time - and the firms will collect monopoly profits in the interim - but if the practice extracts an overcharge, erosion happens sooner or later. Even the best device for extracting an overcharge, merger to monopoly, does not last forever. General Motors, United States Steel, and other aggregations formed by merger are now but shadows of their former selves..."

wished to drive out an equally efficient existing competitor. In order to do so, it must price below its own cost of production. In order to actually shut the target firm down, the predator must price below its average variable cost, resolving to earn losses on every unit sold. As it lowers its price, it attracts a larger and larger market share, but as it is pricing below its own cost, this increases its losses. Thus, predation is very expensive, since the predator's losses exceed the losses it can impose upon its victim.

More importantly, in order for predation to be an overall profitable strategy, the monopoly profits earned later must exceed the losses incurred. Not only do the losses occur first, before the profits, and therefore have a relatively greater present value, but the firm faces the additional problem of re-entry. If the capital of the target firm is durable, the target will simply shut down and wait it out, or go bankrupt and the capital will be transferred to another owner at a lower price. This new owner is again ready to enter when the predator attempts to raise his price to reap the profits of his predation. Such arguments, and the almost total absence of any documented cases of actual attempts at predation, have lead many economists to regard any charge of predation with skepticism. In may cases what appears to be predation is simply the normal competitive process, as less efficient firms fail in competition with more efficient rivals.[10]

In the case of "vertical foreclosure" or the withholding of a critical input to a competitor, the argument has been run that this would allow a firm

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10. Professor (now Judge) Robert H. Bork (1978) after discussing predatory pricing, concludes that "predatory price cutting is most unlikely to exist and that attempts to outlaw it are likely to harm consumers more than would be abandoning the effort," (p. 155). The classic article on predatory pricing is probably by John McGee (1957), The Supreme Court has recently taken precisely this position in *Matsushita v. Zenith*, 106 Sup.Ct. Rept. 1348.

to create a monopoly at one level by its monopoly power at another. To exercise monopoly power at one level of the market it is necessary that a stable monopoly or near monopoly be achieved at that horizontal level. By stable, we refer to at least the following: 1) consumers are unable to switch to substitute products to any appreciable extent, 2) new firms are blocked from entry, 3) existing firms are unable to expand, and 4) foreign suppliers are unable to enter the market or expand their imports.

However, in principle, it does not matter what horizontal level is monopolized. If all of the supplies of one vital input are controlled by one firm, that firm can also control the products for which the input is crucial so long as consumers are unable to switch to substitutable products and foreign firms are unable to enter the domestic market.[11] Notice that having control of two levels is, therefore, no better than having control of just one. At any level all of the monopoly profits can be extracted. These profits might be given different names (either monopsony or monopoly) depending upon whether it is an input or an output price which is affected, but their total is the difference between the cost of producing the good, including all required inputs, and the monopoly price. This is the same amount regardless of the level of production which is controlled. The only difference is in the number of substitution possibilities available to consumers or potential competitors.[12]

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11. See McGee and Bassett (1976), for a discussion on the relationship between vertical integration and input substitution possibilities.

12. Judge Bork, after an extended theoretical and empirical investigation of vertical foreclosure, concludes that "foreclosure theory is not merely wrong, it is irrelevant. Let us suppose, for the sake of argument, that it is possible for a firm to lever its way to larger market shares by foreclosing rivals with vertical acquisitions. Even so, there is nothing to fear unless a market share is gained that is large enough to permit profitable restrictions of output. And there can be no possibility of that if correct horizontal merger rules are applied", (emphasis in the original, 1978 p. 237).

Vertical integration might make entry more difficult. However, this is the case only when a new entrant must enter on a multi-level basis. Again, of course, we must assume that there are no alternative sources or substitutes for the input. Even if all of these conditions hold, anti-competitive conduct will attract vertically integrated new entrants given a sufficient profit inducement. In general, vertical integration is not an impediment to competition, but tends to advantage consumers as the benefits of the planning, coordination and transaction cost efficiencies it provides are passed along to consumers through the effects of competition between firms.[13]

We can summarise as follows. Market power flows from the ability to control output at any one level of the production process. It is mitigated by the presence of potential suppliers, imports and fringe producers as well as by the ability of consumers (either final product consumers, or manufacturers using the good as an input) to utilise substitutes. Possessing a monopoly at more than one vertical stage of production confers no advantage to the firm unless it affects ability of firms or consumers to utilise substitutes. The presence of vertical integration in an industry is of no disadvantage to consumers. Only if the industry is completely vertically integrated, and the firms act collusively, can it increase the cost of entry.

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13. Vertical integration may reduce information and coordination costs by substituting transactions within a firm for transactions between firms. These costs are discussed in Williamson, (1975). Intrafirm transactions may also allow the firm to internalise certain externalities to achieve more efficient production. Further vertical integration may allow more efficient production coordination by reducing the costs of inventorying intermediate products. This is discussed in Blair and Kaserman, (1978). Finally, vertical integration may allow firms to eliminate output distortions caused by price controls and monopoly or monopsony pricing. See, for example, Perry (1978).

In considering merger and acquisition activity in general, and when evaluating the likelihood of any associated "public benefit", it is important to bear in mind the economic role played by mergers and acquisitions. As market opportunities change, the optimum scale of production, degree of diversification, and management philosophy change. When one firm, through an open market offering, buys another, it pays an amount representing a sometimes substantial premium over the market value of the acquired firm. For the stockholders of the acquired firm, this premium represents a windfall.

In the absence of market power, the acquiring firm, however, can afford to pay this premium without diluting the value of its own stock only if it can put the acquired firms' assets to more valuable use. Thus, corporate restructuring is by its very nature efficiency enhancing. Financially successful mergers result only if the new management can outperform the old. The new wealth created is of benefit to stockholders and the public generally, as the nation's human, natural and capital resources are put to work more efficiently.[14]

Thus, mergers between horizontal competitors should not be considered inherently suspect. Only if the combined firm acquires power over price

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14. Henry Manne (1964) was among the first to argue that merger and acquisition are an important method for a market economy to transfer corporate assets to more highly valued uses. More recent research has attempted to measure the increase in asset value brought about by acquisition activity and to determine the underlying sources of these wealth gains. An extensive summary of this research is presented in Jensen and Ruback (1983) conclude:

> "In brief, the evidence seems to indicate that corporate takeovers generate positive gains, that target firm shareholders benefit, and that bidding firm shareholders do not lose. Moreover, the gains created by corporate takeovers do not appear to come from the creation of market power."

need the public be concerned. Such public concerns are limited even if the new firm becomes the sole producer of a product within a national market, so long as external competition is standing ready to prevent an unwarranted increase in price.

3.2 Application of Economic Framework to New Zealand

The opening of an economy to world markets requires innovative antitrust policy. In a small closed economy industrial regulation is a difficult problem. If the minimum efficient scale in an industry is large relative to domestic demand, regulators are forced into choosing between two relatively inefficient policies. Regulators may choose a policy of enforcing the existence of many firms of sub-optimal scale, which generally requires price or output controls to prevent any firm from growing "too large" and threatening other industry members. Alternatively, regulators may choose a policy of allowing a few (or one larger) firm, which again requires formal or informal price control. The resulting system of regulatory controls can create an apparently self-sufficient domestic economy. However, the effect is achieved by suppression of market mechanisms and results in a lower standard of living than would be possible with an open economy.

On the contrary, in an open economy domestic producers, 1) concentrate upon the goods for which the country enjoys a comparative international advantage, and 2) are disciplined by the existence of actual or potential foreign imports. Antitrust policy then becomes more important (because direct regulation of the economy can be and should be reduced). But, to be consistent with the new economic realities, must have much more emphasis upon the promotion of efficient organisations which can export successfully to provide the public with the where-with-all to acquire the foreign goods upon which it will increasingly rely.

The current restructuring of the New Zealand economy is creating both opportunities for and threats to the business community.[15] Previous domestic and trade policies froze the industrial environment and protected firms from the threat of foreign products. Consumers were often subject to prices exceeding world levels; firms in industries too small to support competition were subject to formal or informal price controls. The opening of the New Zealand economy, both through CER and general reductions in tariffs and import restrictions, will necessarily result in consumer gains but will also require industrial restructuring for New Zealand to be competitive in world markets. As the discussion above indicates, this restructuring is likely to result in more efficient resource utilisation which will benefit the public generally.

Within New Zealand, many firms in basic industries have domestic operations which are small by international standards.[16] With the opening of the New Zealand economy we should expect that some of these firms would cheese merger. What we wish to discuss nest is how international competition figures into merger analysis.

In an industry where there are non-trivial amounts of imports, the ability of foreign firms to supply domestic needs severely limits the ability of a firm to increase prices. The existence of non-trivial amounts

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15. In the corporate sector, this restructuring process is illustrated by the increase in takeover and merger activity. In the financial years, 1979-1985, the highest number of takeovers and mergers involving companies listed on the stock exchange in any year was 14, and the annual average for this period was approximately 12. In the year ending 31 March 1986, the number of takeovers and mergers rose to 34. Source: Jarden & Co., (1986) at p.18.

16. It is important to note that large off-shore operations owned by New Zealand companies will not assist such companies in achieving production related economies of scale in their domestic activities.

of imports is, in itself, proof that foreign firms can compete on price and quality with domestic producers. If the importing country is small relative to the world market, the entire country's demand could be satisfied without any appreciable increase in import prices. Domestic producers really exist only because of the transportation cost advantages they might enjoy or are "niche" producers catering to idiosyncrasies in local tastes.

The more interesting case in the present context 9s an industry where the firms involved are producing both for domestic consumption and for export. Since export is into a world market, unless the country is very large in that market, a domestic monopolist could not affect the export price. These prices are determined by world competition. In the case of the present merger, the forest products of New Zealand compete with the products of other world producers in every foreign port. No other country need be concerned that the proposed merger would have any substantial effect upon their import prices.

Even if the merged entity has a large share of total domestic production, if the merged entity attempted to force up domestic prices, domestic firms outside the merged entity, which formerly exported a substantial fraction of their domestic product, could divert production to domestic markets. Thus, for example, even if a merged entity had 70 percent of the domestic production of a good, and if 50 percent of the country's total production was exported, it would mean that the remaining producers with their 30 percent of the total domestic productive capacity could, by themselves, provide for 60 percent of the domestic consumption requirements.[17] The merged entity with 70 percent of domestic production has market power in terms of domestic consumers equivalent to only 40 percent.

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17. This is easiest to see with a simple example. If the total production of the good is 100 units, domestic would be 100 - 50 = 50 units. Hence the remaining producers with 30 percent of capacity could supply 30/50 = 60 percent of domestic consumption. This approach is consistent with the U.S. Department of Justice Guidelines.

Finally, an export oriented economy offers unusual opportunities for new entrants. In a closed economy, new producers might be reluctant about investing in an optimum scale plant merely to take advantage of a short-run price increase resulting from the exercise of domestic market power by some dominant firm. This reluctance is the natural result of the potential entrant's fear that his plant (and plants built by other entrants) will soon lead to domestic over-capacity and resulting prices to low to provide a proper return in his investment. With an export oriented economy, however, there is no need for this fear. If the entrants plant is truly efficient, he can sell his output upon the world market. Thus, regardless of the expected course of domestic prices and production, the new entrant is assured of a place for his product on the world market.[18] Similarly a foreign firm already engaged in export could

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18. This point is related to the issue of "market contestability". Several of the submissions in *Fletcher Challenge Ltd/NZ Forest Products* from both sides, have referred to the economic literature concerning contestability, and commented upon its applicability to the case. Generally, the Fletcher Challenge submissions have used the term broadly, referring to the process whereby monopoly profits are likely to be eroded by the competitive process. They, therefore, consider such factors as the ease with which consumers can switch from one product to another and the ease by which new producers can enter the market. The NZ Forest Products submissions use the term in a much more narrow sense, referring to economic models which posit the absence of any "sunk" costs for a new entrant. In such cases, even a firm having a complete monopoly could expect no super-normal returns, because new firms would enter, remain as long as the price remained above competitive level and then depart, recovering all of their investment by the sale or other disposal of their fixed assets at prices equal to their acquisition costs. The theoretical importance of such models is that they corrected the misconception that high capital costs are a barrier to entry -- instead what is important is how much of that capital cost is "sunk", that is, how much of it cannot be recovered when the new entrant chooses to leave the market.

Examples of perfectly contestable markets are difficult to find. One might be a farmer's roadside fruit stand. Any increase in the cost of

more easily divert product to a market where the price had risen, then it could establish a new plant in that country.

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produce would be sufficient to justify the trivial cost of setting up a few benches to display the fruit and a hand-painted sign (which usually bears the legend "Fruit Stand"). Such stands can and do come and go in a matter of days. In most other cases, much more must be invested in assets which are more or less specialised to particular uses. In a closed economy, particularly a small one, investment in such assets might leave the industry with more capacity that the domestic market can absorb. Thus a potential entrant would anticipate perhaps a short period of profit (until the dominant firm responded to the entrant by a price reduction) followed by a long period of losses. Thus, "hit and run" entry would not be possible, and the potential new entrant would reasonably decide against entry.

The point of the paragraph in the text is that in an export industry contestability works. A domestic dominant firm attempting to increase the domestic price, would find new entry occurring. The new entrants would be attracted by a double opportunity. At first, they would enjoy high profits at home (again, until the dominant firm responded) and later, rather than being faced with excess capacity, they could produce profitably for the export market. We consider this particularly relevant for such products as wood panels; although the required investment is large and specific, overseas markets currently take a substantial percentage of New Zealand production and could take more. Contestability is clearly relevant under these circumstances.

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CHAPTER FOUR

THE PUBLIC INTEREST IN COMPETITION POLICY

Brian Easton.

4.1 Introduction

The merger provisions of the Commerce Act 1986 contain a two stage test for refusal. Section 66 subsection 7 states that the Commerce Commission shall give clearance unless it is satisfied that the merger or takeover would result in any person acquiring a dominant position in a market or strengthening an already dominant position.

But the following subsection 8 provides for the clearance if despite the merger generating dominance, as set out in subsection 7, the outcome "would result or would be likely to result in a benefit to the public which would outweigh any detriment to the public" as a consequence of the dominance.

A similar provision appears with regard to anti-competitive trade practices, which may be authorised if the public benefit outweighs the lessening of competition.

This paper is about this public interest provision of the Act, particularly as it applies to mergers. Because in so few cases has it been necessary to apply the public interest test, it is not possible to give a comprehensive account of what it might mean. Rather this paper examines various public interest justifications which have been raised, in the light of economic theory and those few cases. It also considers what changes in procedures and consequential actions may be necessary.

One such common justification has been an increase in 'efficiency'. As it has been argued that the Commerce Act should be dramatically restructured, to replace the Act's objective of the promotion of

competition with the promotion of efficiency, this wider issue is first considered.

4.2 The Meaning of 'Efficiency'

In common parlance the expression 'efficiency' is a positive word with connotations of motherhood and apple pie. The Concise Oxford defines it as "the ratio of useful work performed to the total energy expended". More popularly it refers to doing something in the best possible way. It is in strange circumstances, indeed, where someone announces that they are pursuing a matter inefficiently. However, in economics the term has a rather stricter meaning; complicated by different economists using different definitions.

There is a formal definition in economics of 'Pareto efficiency'. A Pareto efficient improvement occurs where at least one person's welfare is improved but no other people are made worse off as a consequence. Within a not too onerous value frame, such a move may be said to be beneficial. This applies irrespective of the individual beneficiary. For instance it would still be Pareto efficient if the beneficiary was the richest person in the land, or the poorest; all that is required is that no-one else is worse off.

A situation from which no Pareto efficient moves are possible that is someone can be made better off only by making others worse off - is described as 'Pareto efficient'. All other things being equal, it would be better to be in a Pareto efficient situation than not to be, since in the latter case someone can be made better off.

This formal notion is not what is being referred to when the expression 'economic efficiency' is being used. This may seem a round about way of introducing the concept, but it is important to emphasize that two crucial features of Pareto efficiency do not apply to economic efficiency, even though the terms are sometimes confused. First, as we shall see, economic efficiency is not as rigorously defined, and may have a number of different meanings. Second, as we shall also see, it contains much stronger value judgements.

To illustrate the first point, consider these various recent quotations in relation to the interpretation or reform of the Commerce Act:

(1) "competition policy should have one clearly defined objective - efficiency, defined as maximising consumer satisfaction (consumer welfare) within resource and technological constraints" (Economic Development Commission, 1988).

(2) "The promotion of competition is a means to an end, rather than an end in itself. The benefit of rivalrous competitive behaviour is that it limits the abuse of market power so that economic efficiency is not compromised. Economic efficiency is concerned with the production of goods and services in a least cost manner and in the determination of what is produced in a manner such that a different combination of goods and services would not increase consumer welfare i.e: that goods and services are not "mispriced". .... economic efficiency, that is production of goods and services in a least cost manner and the minimisation of the abuse of market power to raise prices or reduce output" (Southpac, 1988).

(3) "The [Act's] objective should be stated in terms of economic efficiency (the efficient use of economic resources through market processes being central to the welfare of all citizens as consumers) ... The efficiency of resource use is a valid objective of economic policy because resources are scarce relative to people's demands for them. More output of one type of good can only be at the expense of a lower production of alternative outputs. ... Economists use the concept of efficiency to evaluate the success with which an economic system combines scarce resources to satisfy competing wants. This criterion explicitly ignores the effect of different distributions on welfare. In terms of static analysis, efficienc has two dimensions: productive efficiency [and] .... allocative efficiency .... Efficiency has a further dynamic dimension: intertemporal efficiency .... The efficiency criterion can be reinterpreted in terms of minimising

the sum of production and transaction costs in present value terms." (Business Round Table, 1988)

(4) "According to mainstream economic theory, economic efficiency should be the rationale underlying competition law. The potential harm arising from a lack of competition in a market .... [leads to] .... additional resources required to satisfy a given level of consumer demand [which] involves a loss of allocative efficiency. The other type of efficiency which is important to competition economics is productive efficiency. .... Together, allocative and productive efficiency comprise total economic efficiency and determine the level of consumer welfare, i.e. the extent to which consumer demands are satisfied given a fixed level of resources (including technology)." (Jennings and Begg, 1988)

(5) "it would perhaps reduce confusion if the term 'competition policy' were discarded in favour of 'efficiency policy' since economic efficiency should be the sole rationale for this type of intervention."(Kerr, 1988)

There are two salient features of these quotations. First, there is not a lot of consistency about the definition of efficiency, with sometimes two or more different concepts being used by the same writer(s). It is not surprising that no submission on Commerce Act reform actually recommended a legal definition of efficiency.

The second salient feature is that in each case the notion of (economic) efficiency is presented as a concept that is supportable in its own right, and by implication value free. It is not.

It is beyond the scope of this paper to reconstruct a rigorous economic definition of efficiency (Greer, 1989; Easton, 1989b). We shall take an increase in efficiency to mean an increase in national income for a given level of inputs. This increase may arise from what is described above as improvements in allocative and productive efficiency, and (if the timeframe is important) intertemporal and/or innovation efficiency

(Greer, 1989). It can be shown that an increase in national income is equivalent to an increase in consumer welfare in the sense that the Economic Development Commission uses the term.

That the notion of economic efficiency is not value free is skirted in the above quotations. The Economic Development Commission refers to consumer welfare, but does not mention the multitude of consumers. We may ask what if some consumers are better off, and some consumers are worse off as a result of this change? Is that an improvement in efficiency? The answer is likely to be that if there is, those worse off could be compensated for the change, and still there are some better off, then there has been an increase in efficiency. But the compensation need not occur, so efficiency may increase but some consumers may be worse off, and there is no obvious, value free reason why this situation should be described as an improvement, without further consideration of the distributional implications.

The Business Round Table quotation is misleading when it states that "this criterion explicitly ignores the effect of different distributions of welfare" because it does not state what is the implicit assumption about the income distribution. This takes a little space to establish, but it can be shown that the implicit assumption is the extremist one which is unwilling to sacrifice any increase in national income for an increase in equality (Easton 1989b). That is the notion of (economic) efficiency as used above is not neutral towards the degree of income inequality; rather it positively discourages social goals of greater income equality, and income redistribution.

Sometimes the neglect of distributional issues is made by an appeal to 'Hume's Law'.

> "that a dollar is a dollar. Hume's law means that if two persons are bidding at an auction for a sea-side cottage and a poor homeless family is outbid by a wealthy family wishing to own a sea-side weekender, the result of the bidding is efficient. The house has been placed in the hands of the most dollar votes. The effect of Hume's law is to divorce consideration of the

allocation of resources from consideration of the distribution of wealth (or income)." (Williams, 1988)

There is an irony that the name of Hume should be associated with a principle which is so manifestly not a natural law. The doyen himself would perhaps have described it as a principle of conduct, and subjected its standing to a far more rigorous analysis than its users do today.

All this is enough to warn us that making efficiency the objective of competitions policy is a far from value free criterion. Those who propose it either have a set of values they are unwilling to reveal, at least as evidenced by the above quotations, or they have not properly understood the concept they are advocating.

As the scope of this paper is the public interest provisions of the existing Commerce Act, the question of whether its primary objective should be changed to efficiency will not be further pursued.

4.3 Efficiency as a Public Interest Concern

Suppose a merger (or restrictive practice) has been found to cause or strengthen dominance (or lessen competition) in a market. Is there a case that the increase in efficiency from the action should be sufficiently in the public interest to justify authorization? To discuss this it is necessary to clear away some less controversial points.

First there is a small problem of terminology. The adjective 'public' can sometimes be used to mean 'non-private' and sometimes to mean 'private and non-private'. In my view the Commerce Act probably means to include the private benefits to the firms involved in the totality of the 'benefit to the public'. Because the Act requires a balancing of public detriment, this particular interpretation would give the same outcome as the alternative one which excludes the firm benefit and detriment. It is merely a matter of being clear as to the terminology. The broader one is used in this essay.

Second and obviously, any public benefit has to be measured in net, not gross terms, which means that account has to be made also of the public detriments.

The third point is that an economist would tend to argue that any claims for efficiency in the public interest imply there is no other reasonable or more competitive way of attaining the cost reductions. If there was, say via another suitor, then the public interest could be attained this way without the detriment of the lessening of competition. This suggests that the measure of the public benefit should be in comparison to the next best option, not to the pre-merger situation. This approach is not mentioned in the Commerce Act, but some of the Commission's decisions have tended along this line.

Fourth, it is well to note that in actual practice estimates of the efficiency gains typically are crude, and may well be optimistic. Transition costs, in particular, are likely to be underestimated. The impression I have gained from the various cases in which I have been involved is that the business community gets involved in mergers (and restrictive practices) on the basis of hunch and strategic considerations as much as after careful cost accounting.

This results in a real practical problem for the Commission, if it wants quantitative estimates of any public benefits, because it requires procedures to evaluate the claims and counterclaims. Confidentiality and time pressures will add to the difficulty of determining the reliability of the estimates.

Fifth, and moving towards the main focus of this section, it is rare for a merger case before the Commission not to involve some increase in (production) efficiency, in that the applicants claim that they will be able to reduce costs, typically from rationalisation and/or economies of scale, following the merger.

Who benefits from these cost reductions will depend upon the market circumstances. Sometimes consumers will experience lower prices and/or better service; sometimes the producer will get a boost to

profits. While in the situation where there is no lessening of competition the cost reductions are more likely to be more passed onto the direct consumer - relative to what would have happened if there had been no merger - that is not inevitable.

Thus while the circumstance where the public interest arises involves the possibility that all or most of the costs savings will be retained by the firm, this case by itself is not a particularly important one since consumers need not be worse off. What is at issue is the possibility that because of the acquired dominance the (direct) consumer will face a higher price and/or inferior service relative to the pre-merger situation. That is, the merged firm will keep all the savings, and in addition will gain profits from charging higher prices.

Thus we have a tradeoff between a loss of direct consumer welfare and a gain in production efficiency. The application of the public benefit provisions of the Act cannot avoid such a tradeoff. It could be ignored by focusing only on efficiency, but that would be an equivalent to a tradeoff in which the (direst) consumer interest is given zero weight.

It is not sufficient to argue that producers are consumers too. Even if there are no foreign shareholders (whose consumption welfare is outside the direct domain of New Zealand policy objectives) then the producer/consumers are likely to differ from the direct consumers. Sometimes there may be a close coincidence. A merger between exporting dairy factories in the same region may benefit the dairy farmer shareholders at the expense of the dairy farmer suppliers. But as the two groups are almost identical the issue is not acute. Such situations are rare.

More often the groups are much more separated. This was very evident in the merger involving the two Auckland milk suppliers, for the consumers were Auckland city households and the producers were South Auckland and Waikato dairy farmers. Similarly forestry company shareholders may be a tiny subset of the ultimate purchasers of the company products.

Practically then, efficiency as a public benefit generates a tradeoff between the return to the producer and the return to the suppliers and direct consumers. The Commission is given little guidance on how to balance their interests.

The extremes are fairly straightforward. The situation where the few producer/shareholders had substantially higher incomes than the many consumers, and where the efficiency gains are small compared to the return the merged firm could generate from using its market dominance is likely to result in a ruling against the merger. The situation where the consumers and producers are on similar income levels, and where the efficiency gains are large compared to the gains from market abuse is likely to get more favourable consideration.

In practice most decisions will involve less clear comparisons. At this stage all the Commission might ask for is convincing estimates of the relevant ratios. And all the public might ask for is some clarity and consistency in the Commission's reasoning.

This conclusion differs dramatically from that of Vautier who argues that

> "public benefit should not require applicants to prove that potential public benefit is distributed to any particular group, e.g. consumers in a particular market. The more emphasis that is placed on the distribution of potential gains, as distinct from their realisation, the more political must be the decisionmaking process." (p62)

Arguing that the public benefit excludes distributional issues involves an odd view of the public benefit. Suppose the outcome was that all the gains, and then some, went to very rich shareholders domiciled overseas and who never visit New Zealand. Could it be seriously argued that this was in the "public benefit"? Vautier appears to be trying to confine "public benefit" to some notion of efficiency, which as we have reported involves a latent distributional assumption.

Thus the application of the public benefit test cannot avoid the question of distributional effects. If distributional issues be political, then so is the public benefit test.

How then is the Commission to interpret the public benefit? Ultimately this has to be within the public policy framework of current economic and social management.

4.4 The Public Policy Framework

There is specific provision in the Act for the Government to advise the Commission of its economic policies. This has not yet been invoked.

However, it would be idle to assume that the Commission decisions are not influenced by the public policy framework. One only has to consider how an open minded Commission might be intellectually persuaded by a Marxist as to a particular interpretation of competition policy, and yet the likelihood is that such an interpretation would not be adopted in the Commission's decisions.

Practically the Commission has the choice of being conscious about its use of the public policy framework, or of being unconscious. This is a different issue from being explicit or implicit in the judgement. Transparency and clarity however would suggest consciousness and a cautious explicitness.

There is, of course, room to debate what is public policy. For instance some of the advocates of efficiency as the Commerce Act objective, have argued this is the primary objective in public policy generally. It would be hard to get a government certification to this effect. And in any case it is easy to get a long list of instances of industrial reform where it is evident that the objective of efficiency has been moderated by transitional easing and other considerations; border protection, deep water fishing, taxi licensing, town milk supply, vineyards, the West Coast railway line...... It could also be argued that in a number of cases of state owned enterprise reorganisation, the objective was the introduction of competition rather than static efficiency gains.

Such examples provide an indication of how the Commission might interpret the public benefit. Moreover if there were a change in government policy, the Commission can easily respond. For instance, suppose the government decided to be more interventionist in terms of supporting failing regions. This would be a signal to the Commission to consider regional issues more weightily, without there being a letter of direction from the Government.

4.5 Labour Reductions

This approach indicates how the Commission should think about the question of the public benefit, when considering the labour shedding that usually goes with efficiency gains. (There may be other factor inputs for which the issue arises, but labour is the most obvious and the exemplar.)

Practically this issue arose in the *Whakatu/Advanced* case (Commerce Commission Decision 205). The Commission accepted the Combined Trade Unions' argument that the labour market should be taken into account. It went on to find there was a detriment from the loss of employment, mentioning in particular that skilled meat workers would find it "difficult (and impossible in some cases) to relocate their skills" (para 56).

The majority opinion found that there were some employment benefits, from the enhanced security of those who retained their position but these were not outweighed by the detriment from redundancies. The minority opinion argued "I do not accept that a substantial loss of employment should be viewed lightly".

There is a paradox in all this. As a first approximation, the economic evaluation of the immediate detriments from the redundancy will almost exactly balance the gains from efficiency. Thus if efficiency and employment were to be given equal weight in the public benefit the net effect would be near zero in the short term.

One resolution is that if there were adequate redundancy packages, an effective active labour market program, and full employment, the shed labour would be easily redeployed, in which case the additional output from the released resources would convert this part of the public benefit back into a quantum similar to the efficiency gains.

Alas these preconditions no not currently apply, particularly the third one. What is the Commission to do?

The public policy framework argued earlier, suggests that the Commission should look at similar cases. In particular, it is evident from the corporatisation policy that the government has given a considerably higher weighting for efficiency gains relative to redundancies, even where there is little hope of early labour redeployment. Without cases to the contrary the Commission would make a similar weighing. Even if each Commissioner has considerable reservations about the rightness of the labour market component of the corporatisation policy, the Commission has little choice but to follow the general policy framework.

4.6 Rationalisation

The *Whakatu/Advanced* case provides illustration of another public benefit issue; that of rationalisation. There was a complicated irony in the case which may have escaped the Commissioners.

The reason why the rationalisation would lead to a lessening of competition was that the freezing industry has significant entry and exit costs; it is not a contestable industry (Grimmond 1986). These were the very same factors which required the collective agreements aimed at rationalising the Hawkes Bay industry.

Suppose, as the Commission concluded, that this rationalisation was in the public interest. And suppose, as a majority of the Commissioners concluded, that there was no other obvious or less painful way of rationalisation. In reaching this conclusion, it would note that before 1984 a government-led restructuring may have been feasible, but that the current policy framework would rule such an option out.

In such circumstances the irony is that the very factors which generate the need for the collective agreement, are the factors which result in the lessening of competition. In the light of this analysis it is not surprising that some (in fact a majority) of the Commissioners found the public benefit from the rationalisation of the industry outweighed the detriment from a loss of competition. It is noteworthy that the main point of the minority report is that there was an alternative private sector way of bringing about this rationalisation.

4.7 The Auckland Town Milk Supply Case

Perhaps an even more interesting case, where the complexity of the market regulation generated an unexpected public benefit, was the proposed merger between NZ Cooperative Dairy Company (NZCDC) and the Auckland Cooperative Milk Producers (ACMP). Relating the story involves some detail, although a number of aspects involved in the merger will be ignored for simplicity and brevity.

NZCDC is New Zealand's largest dairy company, based in the Waikato concerned primarily with manufactured milk - that is milk which is mainly exported as butter, cheese, casein, and such like. It also is involved in town milk supply to a number of South Auckland centres and to greater Auckland City, (as well as related products such as yoghurt, cream and cottage cheeses, cream, dairy foods).

ACMP was not at all involved in manufactured milk, being a town milk supplier, mainly to Auckland City, plus the production of a similar line of related products.

For five decades the town milk supply had been regulated quite separately from manufactured milk. Town milk supply was based upon a system of the licensing of milk delivery. Those who had the licences had the protected monopoly for delivery in the area, including to bulk purchasers such as hospitals and supermarkets.

As a result of the licensing regime, town milk supply dairy farmers used a different technology from manufactured milk supply. The latter only supplied 'seasonally', typically for eight or nine months, drying their cows off when there was insufficient feed. Town milk demand was annual, so that the suppliers kept their cows milking all year, using expensive fodder over the winter months. Not surprisingly, town milk supply was more expensive per litre.

In late 1987 legislation was introduced, to be passed in March 1988, which increased competition in the town delivery, with the aim being to integrate the two dairy industries. Ultimately - in 1993 - there would be no licensing of local delivery, but initially only bulk supply was liberalised. In many cities this was not of great immediate effect, since they already had only a single supplier, but in Auckland with its two suppliers it meant that the each could supply all bulk purchasers, who made up about 10 percent of total purchasers, including those in the other company's supply area.

Cynics will not be surprised to learn that shortly after the thrust of the liberalisation measures were announced, ACMP and NZCDC began discussions which led to the merger proposal. However ACMP was in a difficult position, with problems with long term milk supply and no access to the manufactured milk industry.

(There was an alternative merger proposal involving ACMP and a consortium of South Auckland dairy companies who were in competition with NZCDC, mainly in the manufactured milk area. ACMP management and shareholders did not consider their terms as attractive.)

While NZCDC argued that other dairy producers were potential entrants in the market, the Commission found that the merger would create dominance. The question then turned on whether, nonetheless, the merger was in the public interest. The NZCDC argued that there would be efficiency gains from rationalisation, and the benefits to be discussed in the next section of improving the economic situation of the export dairy industry.

However they also claimed that there was another technology which would lower milk supply costs, and integrate the town and manufactured milk supply. This would be induced by a Winter Milk scheme, which involved town milk suppliers being paid manufacturing milk prices in the on season, and a premium for milk supplied in winter months, signalling them to switch to a manufactured milk mode of production, but delaying some of the calving to bridge the milk supply in the off season.

There was no doubt that if economically viable, this was the sort of industry rationalisation that the new regulatory environment was intended to generate. Normally ordinary market processes would do this. The NZCDC, with its cheaper milk would offer lower prices to city consumers, forcing ACMP to adopt the change. NZCDC thought there were other parts of New Zealand where a Winter Milk scheme would also be successful and cheaper, but that their area was the best place to introduce it. However in the opinion of NZCDC the new regulatory environment discouraged the scheme's introduction.

They reasoned as follows. Suppose the NZCDC were to introduce the scheme which would take three years to become fully operational. A number of NZCDC suppliers personally attested to the Commission that they would resist any such change to their traditional practices. They were understandably apprehensive at the rearrangement to their lives the Winter Milk Scheme would entail. It was a reasonable inference that they would transfer to ACMP, who would welcome them.

This would leave NZCDC with a shortage of supply of milk over winter months. Even if they were to withdraw from bulk supply, NZCDC would not have been able to meet all their household commitments for the first year or two of the scheme. Under the town milk licensing scheme that would remain in operation, given a shortage of milk supply in winter months NZCDC would have had to return some of their household district licences, which would have been snapped up by ACMP, who already had the supply capacity from the farmers who had changed companies. (Nor would the ACMP be as interested in a winter

supply scheme because its farmers were not involved in manufactured milk supply.) However, as the NZCDC built up its supply capacity, the reverse would not happen, because ACMP would not release its extra licences.

The effect, then, of the introduction of the new low cost regime would be for NZCDC to lose suppliers and hence, because of the town milk supply licensing arrangements, markets. As long as the licensing regime was in place they would not be able to recover market share at a later date, even if cheaper supply conditions meant they sold cheaper milk. The outcome would be the reverse of reverse of the normal market situation where a cheaper technology would increase market share.

NZCDC explained that to avoid this, they would delay the introduction of the scheme, by up to three years. The costs would be a less efficient milk supply and (possibly) higher milk prices, for Auckland and other centres where the scheme was commercially viable. A quantitative estimate of this loss, albeit over a limited period, suggested it was larger than the rationalisation gain.

Of course there are problems with this story. An illustration of one powerful weakness will do here. Suppose the merger is proceeded with, but that the scheme proves to be more expensive than the current system. Presumably the company would easily pass the burden on to the milk drinkers of Auckland.

However the Commission found that the potential public benefits of the merger, of which the Winter Milk Scheme was a major part, outweighed the detriment from dominance and authorised for the merger to go a head. Ironically, the regulatory environment was a major contributor to the post merger dominance and to the public benefit that the merger would generate.

Subsequent events throw little light upon the correctness of the decision. It is true that NZCDC raised its prices three times in the period from January 1988 to May 1989. This could be argued to be a result of the lack of competition, but equally it could be argued that NZCDC tended

to follow other North Island suppliers in their hikes. In any case, the logic of the changed market regulation was that town milk prices would more closely follow manufactured milk prices, and this was a period of rising world dairy prices. However it can be reported that NZCDC did introduce a Winter Milk scheme, but because it is phased in it is not yet possible to assess its success.

4.8 Other Reasons for the Public Benefit

Various other reasons for the public benefit have been submitted. In the *Fletcher Challenge Limited/New Zealand Forest Products* proposed merger (Commerce Commission Decision 213), Fletchers argued there were benefits from various forms of rationalisation, synergies, reduced use of public roads, and export market development. The Commission did not find these benefits weighty enough to compensate for market dominance.

In *Amcor/New Zealand Forest Products* (Commerce Commission Decision 208) claims were made for enhanced export potential, the introduction of new products, lower prices to customers (presumably an efficiency claim), regional benefits to the depressed Northland region, and CER. Again the Commission did not find them sufficiently weighty.

In the *NZCDC/ACMP* case, as well as rationalisation and regulatory distortion, export development, the importance of the dairy industry, CER, and new products were claimed as public benefits. It would appear that the latter group of arguments were given as little weighting as in the previous two mentioned cases.

From the public policy framework, this is not surprising. Suppose each firm had gone to the government requesting tariff protection, a subsidy, or some such intervention on the basis of these claimed public benefits. The government response would have been a sympathetic hearing, an admission these were public benefits, and a firm no - not unlike the Commission. At issue is not whether they are public benefits, but whether the benefits are so large that they justify the intervention,

particularly that the intervention itself is likely to have deleterious effects.

The *FCL/NZFP* case included another public benefit plea which deserves a little more consideration. It was argued that the merger would maximise shareholder wealth. It is doubtful that asking for a government intervention in order to increase or maximise shareholder wealth would get a sympathetic hearing from government. However what was really being submitted was that the efficiency gains from rationalisation (which did not appear in lower prices) would benefit owners. So that argument amounted to an alternative presentation of earlier claimed public benefits, rather than a new one.

One can but muse as to the sort of debate which might ensue if the evidence of shareholder wealth as assessed by share prices was to be seriously considered as a public benefit. The debate would certainly keep a number of economists well renumerated. Since there is good evidence that mergers frequently depress the share price of the successful company in the long run, and may (but less often) depress total shareholder wealth (Duncan et al, 1988) one might end up with the Commission prohibiting all competition lessening mergers as being against the public benefit! This is perhaps another example of the dangers of assuming that the rationalisation efficiency gaining benefits claimed by management are always reliable.

There may well be other circumstances in which the public benefit on this could be found weighty. For instance a good example of the failing firm case has not yet confronted the Commission. However cases where the public benefit is likely to outweigh the detriment of dominance are likely to be rare and idiosyncratic.

4.9 Weighing and Balancing

The rarity of opportunities to weigh and balance the net public benefit against the detriment from dominance leaves few case examples and a degree of uncertainty from the lack of case law.

The public policy framework proposed here may reduce the uncertainty. The Commission might ask itself is are there cases where the government has given a favourable intervention for parallel public benefits.

It would of course, be inappropriate for the Commission to approach the government for a ruling. However it might invite the applicants to submit suitable cases for its consideration, or explain why there are no parallels.

4.10 Procedures and Consequences

A significant weakness in cases where the public benefit is to be argued, the public is not represented by a counsel. This means the Commission does not have the benefit of alternative scrutiny of any arguments, in an area which we have seen is really quite complicated.

Perhaps the Commission should appoint an amicus curiae in such cases, who would have access to his or her own expert advisers/witnesses. The expense would be paid for by the applicant, and, if confined to cases where the public benefit provision was invoked, would discourage frivolous invocations.

If dominance is found but a public benefit is considered to outweigh the detriment, it is reasonable to suppose that the merged firm will use its new market power at the expense of the consumer (or supplier). The standard assumption in antitrust is that if the fox is put in with the chickens he will eat some, irrespective of his protestation of innocence before the occasion. Of course there are foxes sensitive to the rights of chickens; it is just that you cannot run a farmyard on the assumption that all are.

To an extent the public benefit has to outweigh the consumer exploitation. However in the *NZCDC/ACMP* case the Commission indicated the price control powers in the Commerce Act could be used if it thought the abuse was excessive.

The trouble is with such a threat that there is a clear and understandable reluctance to use price controls (Collinge 1988). They are clumsy in even favourable circumstances (Easton 1986) and the experience of officials with them in the pre 1984 era was far from happy.

Perhaps the Commission should not have bothered with such a threat. Alternately, perhaps there is a need for a wider set of policy measures to restrain firms where, say, a merger is approved in the public interest, despite the acquisition or increase of dominance. These could include

- requiring "four p" reporting of annual productivity, price, profit and performance in the dominant market, to indicate the firm was under notice of consideration for price controls,
- divestment provisions in the Act, which even if never used may represent a deterrence to abuse of market power,
- and, when the public sector regulatory framework is settled, similar provisions for parallel private sector firms, particularly private sector common carriers (or essential facilities).

This is not a comprehensive set of measures. What has to be recognised is given the public benefit provisions of the Commerce Act, that on occasions the Commission will authorise mergers which subsequently prove to create market dominance, and that dominance can develop in ways other than via mergers. There may well be a tendency towards monopolisation in some sectors of the economy, particularly as the present round of government liberalisation measures are exhausted. It is not obvious that the provisions of section 36 of the Act provide sufficient restraint.

Moreover, the traditional concerns which lead to a heavily regulated industrial structure have not disappeared. The Commission is familiar with aspiring merger candidates explaining that they need the whole of the domestic market to ward off foreign competition or as a base for exporting. Local raw materials, exchange rate variations, distribution advantages, and overseas supply circumstances and uncertainties - among many things - may give the firm a comfortable degree of market dominance. There may be a public benefit, but may it not be greater if

there is regulation in the public interest, where there is not adequate market regulation? The traditional concerns do not go away by ignoring them.

4.11 Conclusions

Sometimes there will be a public benefit in a merger, despite a lessening of competition. Such occasions may be rare, but it makes sense to include this situation as one appropriate for merger authorization.

Crude criteria such as efficiency need to be tempered by rigorous economic analysis. It is not possible to avoid 'political' judgements - ignoring them with covert assumptions is hardly adequate. However the assessment of public benefit is likely to be most satisfactory if it is recognised that decisions are taken in the context of the existing public policy framework and consideration be given to parallel public policy decisions taken elsewhere.

Moreover there needs to be consideration as to the way the matter is presented before the Commission, and mechanisms to regulate the situation after a merger is approved in the public benefit.

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CHAPTER FIVE

COMPETITION POLICY, MERGERS AND THE NET SOCIAL BENEFIT TEST

Michael Pickford[1]

5.1 Introduction

As the Commerce Act (1986) is current being reviewed (see Department of Trade and Industry, 1988), it is timely to consider its objectives. The long title of the Act states that its purpose is "to promote competition in markets within New Zealand ..." The past chairman of the Commerce Commission has interpreted this as follows (Collinge, 1986, pp. 11-12):

> "The purpose of such legislation ... is to better promote the freedom to compete in the interests of better economic organisation and the protection of consumers. More specifically, a competition policy seeks to achieve lower prices, more opportunity of choice, greater innovation by suppliers and so on. This is to foster the welfare of consumers - and we are all (whether businessmen or individuals) consumers - and to foster markets which will best promote economic efficiency."

Competition as a form of market organisation is thus viewed as being not only a desirable end in itself, but also as a means of promoting other

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1. Helpful comments on an earlier draft by Alan Bollard, Douglas Greer, and David Round are gratefully acknowledged. The usual disclaimers apply.

objectives such as consumer welfare and economic efficiency.[2]

A central problem, however, is that there are circumstances in which these three objectives may conflict (Greer, 1988). For example, a merger between the two main firms in a market may reduce competition (and consumer welfare) but improve efficiency. Part V of the Act recognises this possibility by qualifying the presumption in favour of competition. Where a restrictive trade practice "substantially lessens competition", or a merger would lead to the "acquisition" or "strengthening of a dominant position in a market", the Commerce Commission is required to weigh the "detriment" (disbenefits) from the suppression of competition against the "benefit to the public" flowing from the proposal. Only when the Commerce Commission is satisfied that a positive net social benefit results can it authorise the restrictive practice or merger proposal.[3] The main purpose of this paper is to examine how the Commerce Commission has used the net social benefit test to resolve conflicting objectives in some recent important decisions.

Unlike its predecessor, the 1986 Act provides no guidance on how public benefits are detriments are to be measured.[4] In *Whakatu* (Commerce Commission, 1987b, para 25) the Commerce Commission stated that the Act is "worded broadly and there appears no limitation as to the nature of public benefit which may be claimed, nor indeed the

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2. A summary of the political thinking behind the Act is given in Vautier (1987, pp 52-56). Wider social and political advantages of competition - eg. the dispersion of economic and political power, freedom of enterprise, and the avoidance of social dislocation - are canvassed by Ahdar (1986).

3. Resale price maintenance agreements, and the use of a dominant position in a market to restrict competition, cannot be authorised.

4. The guidelines issued to proponents by the Commerce Commission are reasonably specific, however.

competitive detriment to the public flowing from the lessening of competition." Nonetheless, decisions have tended to emphasise economic (rather than broader social) effects, such as rationalisation and other efficiency gains, the impact on prices and consequent shifts in the distribution of income, and changes in the range of choices available to consumers and users. Where possible, the Commerce Commission has attempted to quantify these affects, although the final net social benefit test has always been subjective and non-quantified.

A useful framework for assessing the conflicting objectives of competition policy, at least where price and cost effects predominate, is provided by the Williamson (1968) model, which is outlined in section 2. The model can be applied to horizontal price-fixing, dominant firm, and horizontal merger cases, but in this paper we concentrate on the last. In section 3 the model is applied briefly to two important 1987 merger cases where the protection of consumer welfare seemed to be paramount. Then in section 4 the salient points of the 1988 Auckland town milk case, with its stress on economic efficiency, are discussed. In section 5 it is argued that the difficulties of applying an efficiency standard are likely to lead to the authorisation of merger proposals that may, in fact, generate negative net social benefits. This would further weaken a merger policy that is already lenient by most overseas standards. The reasons for such leniency are set out in section 6. Finally, in section 7 a proposal that may partially resolve the tradeoff problem is put forward.

5.2 Conflicting Objectives of Competition Policy

The Williamson model utilises partial equilibrium analysis and measures welfare as the sum of consumers' and producers' surpluses. Because the analysis is static the emphasis falls on the allocative and productive components of economic efficiency; the innovative element is omitted because of modelling and other difficulties. In Figure 1, DD' is the linear demand curve for an homogeneous good faced by two market dominating duopolists prior to merger (or a group of colluding oligopolists or single dominant firm). The firms have identical

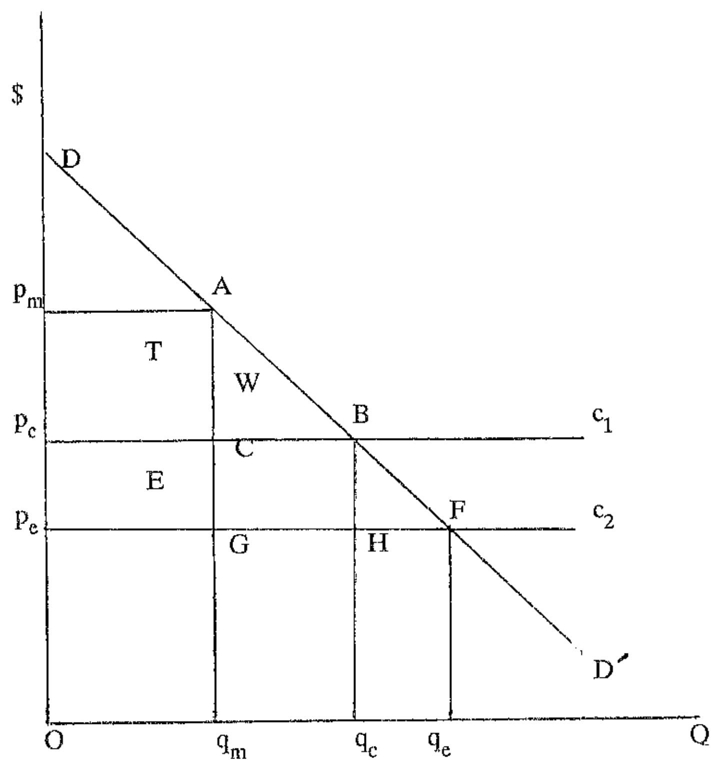

FIGURE 1

horizontal unit cost curves at c_1. The market is assumed to be competitive, leading to the allocatively efficient price of p_c and output q_c. Consumer welfare, as measured by consumers' surplus, is maximised as the area DBp_c. The objectives of competition, efficiency and consumer welfare are thus initially all being attained. After the merger (or when the colluding oligopolists or dominant firm exploit their market power) price is raised to p_m and output falls to q_m. The market is no longer competitive, and consumer welfare is reduced by the loss of p_mABp_c to the area DAp_m. A competition policy aimed solely at maintaining competition or maximising consumer welfare would thus oppose the merger. The impact on efficiency is more complicated, but on balance may be beneficial. If the rectangle T ($=p_mACp_c$) is treated as a transfer from consumers' to producers' surplus (monopoly profits), the adverse impact on allocative efficiency is limited to the triangle W ($=ABC$). At the same time, the merger (or cartel or dominant firm) may also improve productive efficiency through rationalisation or scale economies. A reduction in costs from c_1 to c_2 produces a welfare gain equal to the rectangle E ($=p_cCGp_e$). Under plausible assumptions,[5] only a small reduction in unit costs may be sufficient for E to exceed W, since the latter accrues at the margin whereas the former is spread over the entire output range. Hence a competition policy attempting only to maximise efficiency would approve the merger.

The inferred objectives of the Commerce Act require the Commerce Commission to judge mergers and other practices using a composite standard to which the competition, consumer welfare and efficiency objectives all contribute. Thus in the hypothetical merger case, the adverse effects on consumer welfare and competition have to be traded off against the efficiency gains and the higher profits for firms. Such assessments will be influenced *inter alia* by the Commerce

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5. The plausibility of Williamson's assumptions have been debated frequently. For two critical reviews see Cowling *et al* (1980, chap 2), and Fisher and Lande (1983, pp.1630-44). Note that the partial equilibrium framework greatly restricts the range of effects to be considered.

Commission's view of the extent to which competition will be impaired by the merger, and its value judgements about the desirability of (and hence the weights to be attached to) and changes in income distribution. We shall argue below that the Commerce Commission has not followed a consistent tradeoff policy in applying the net social benefit test.

A final point worth noting is that the competition policy tradeoff is likely to be accentuated in small countries. In large countries like the United States efficiency gains tend to be slight, at least for large firms who most threaten competition by merging, so such gains can largely be ignored in pursuit of a competition goal (see the discussion on the Justice Department's "Merger Guidelines" in Martin, 1988, pp. 279-85). In small countries like New Zealand, where the scope for scale economies is often great in relation to market size (Scherer *et al*, 1975, pp. 92-97, 134-43), the prospective efficiency gains may quite often be substantial, as may the anticompetitive effects.[6] Moreover, the tradeoff problem may be aggravated by the present time as a byproduct of the Government's policy towards deregulation and stimulating competition, which has encouraged firms to improve efficiency through merger and rationalisation.

5.3 Net Social Benefit and Consumer Welfare

While the Commerce Commission generally cannot measure with any degree of precision the W, T and E areas in the tradeoff diagram, their size can be assessed as large or small and the appropriate distributional weights can be applied. In early judgements under the Act these weights tended to favour consumer welfare rather than efficiency.

In the *Goodman Fielder/Wattie* merger case (Commerce Commission, 1987a) monopoly pricing was anticipated through the acquiring or

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6. The same conflict between objectives is evident in Australia from the discussion in: Trade Practices Commission, *Annual Report, 1987-88*, chapter 1.

strengthening of a dominant position in the markets for poultry, stockfeed, flour milling, yeast, bread and frozen pastry products, but the two companies expected to lower costs through rationalising various parts of their operations In applying the net social benefit test, the Commerce Commission did not even mention the allocative efficiency loss triangle W. Instead, the rectangle T was treated as a detriment because of its adverse impact on consumer welfare, with little, if any, allowance being made for the corresponding increase in profits. Implicitly, the Commerce Commission was giving a high weight to income distribution changes disadvantageous to consumers, and a low weight to changes benefiting producers (Pickford, 1988). The Commerce Commission justified this approach by stating: "An important function of the Commerce Act is to protect the consumer in circumstances where there is an absence of effective competition" (para. 272); and: "It is competition which protects the consumer and the interests of the consumer must always 'bulk large' in the Commission's deliberations." (para. 278).

Further, the Commerce Commission played down the efficiency gains claimed by the merger participants because of uncertainty about their size, and the extent to which they would benefit consumers and benefit New Zealand:

> "In relation to rationalisation generally, the applicants were not specific as to the division of processing between Australia and New Zealand so that it is not easy for the Commission to assess the likely benefit of rationalisation to the New Zealand public. A rationalisation of the head office of the merged concern to Sydney would be more likely to benefit Australia, for example. If cost-savings can be made by the New Zealand participant then such efficiencies will, in the view of the Commission, constitute a public benefit. As to the weight to be attached to such benefit, much depends upon the gains from a New Zealand viewpoint and the corresponding losses. Much would also depend upon the likelihood of the benefits being passed on to New Zealand consumers or the extent to which they would benefit in terms of product range etc. There was insufficient

evidence of specifics before us to convince the Commission in this respect." (para.268)

The Commerce Commission concluded in effect that the merger would have a negative net social benefit i.e.

$$\alpha T_c + \phi W > \beta T_p + \gamma E \quad (1)$$

where (ignoring signs) T_c is the loss of surplus to consumers, T_p is the corresponding dollar gain in profits to the merged company, and α, β, ϕ and γ are distributional weights such that $\alpha > \beta$, $\phi = 0$, and γ is "small".[7]

The same approach was followed in the *Fletcher Challenge Ltd (FCL)/NZ Forest Products Ltd (NZFP)* takeover case (Commerce Commission, 1987c). The likely efficiency and other savings were considered small in relation to the importance of the markets involved (for logs, kraft pulp and certain fine papers), and to the significant scope for using market power "to increase prices, reduce services, etc. in those markets...". Here the sizes of the E and T rectangles were implicitly being compared. Then in the weighing process the Commerce Commission found:

> "... Dr Bollard's analysis persuasive in that, in the absence of an effective competitive discipline, the benefits resulting from the merger would be likely to benefit the company and shareholders, and that there would be no discipline which

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7. The Trade Practices Commission in Australia has also attached low weights to efficiency gains that are not passed on to consumers by lower prices, according to Williams (1988, p. 11). The companies appealed against the Commerce Commission's Decision to the High Court. The Commerce Commission considered, and subsequently authorised subject to divestment and conduct conditions, a revised merger proposal (see Commerce Commission Decision No 212).

> would ensure that benefits would flow through to the consumer, for example. This fact is something which the Commission can and should take into account in the weighing process. Where the detriments are likely to be to the wider public, the Commission may give weight accordingly." (para. 168)

The Commerce Commission's refusal to authorise the takeover can again be characterised in terms of equation (1). Clearly such decisions are not consistent with the maximisation of the efficiency objective, where shifts in income from one group to another are ignored. Rather, they serve to enhance consumer welfare by maximising consumers' surplus, and to maintain competition by denying market-power-enhancing combinations.

5.4 Net Social Benefit and Efficiency

In the recent *New Zealand Co-operative Dairy Company (NZCDC)/Auckland Co-operative Milk Producers (ACMP)* merger case (Commerce Commission, 1988), the precedents set in *Goodman Fielder/Wattie* and *FCL/NZFP* were overturned. For this reason, and because of the unusual amount of data uncovered on possible pricing and efficiency affects, the case is worth examining in some detail. Attention focussed on the Auckland town milk market, where the Commerce Commission found that dominance would be strengthened.

The Detriment

The main source of detriment was the scope for monopoly pricing made possible by the 100% market share of the merged firm, and considerable entry barriers. New entry was limited by statutory regulation to the relatively small non-home delivery segment of the market (ie. the 12% held by supermarkets and bulk users). The Commerce Commission accepted that entry into that segment was hindered by the fact that town milk suppliers are contractually tied to existing milk processors. An 18 month period might elapse before continuity of supply could be ensured. This set a time delay on new

entry. Since all the potential entrants were processors based outside Auckland, the height of the transport cost barrier would determine how far prices could be raised before attracting new entry. The Commerce Commission's best estimate, based on the site nearest Auckland, was that transport costs would add 4½ to 6% to the price. Combining these elements, it concluded that the detriment would be equivalent to an increase of around 5 c/l (cents/litre) on the price of 90 c/l for about 18 months.

However, this reasoning seems faulty. Firstly, the 5 c/l addition to the price gives the limit price, rather than an entry-inducing price, in the face of the transport barrier. Secondly, the 18 month delay might raise the limit price further because of uncertainty over the adequacy of milk supplies, the possible need to offer suppliers a price premium, and the potential entry-deterring reaction of the incumbent. Finally, other entry barriers mentioned in the decision, such as product branding and the incumbent's scale economy advantage, ought to be incorporated in the aggregate entry barriers.[8]

A price increase of 5 c/l thus seems modest, although continuing regulatory surveillance may provide a greater restraint than the entry threat. Hence in Figure 1 we have p_c = 90 c/l, p_m = 95 c/l, and q_c = 89.815 m.l. (million litres) (the last being milk consumption in Auckland in the 1986-87 year). Assuming arbitrarily a unit point price elasticity of demand (η) at the competitive price, q_m = 84.825 m.l. Then triangle W = \$124,750 and rectangle T = \$4,241,250. A further, smaller (smaller than W?) competitive detriment stemmed from the lessening or removal of choice facing suppliers, vendors and supermarkets. Given

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8. The fact that both merger participants were operating their milk-processing plants at only 50% capacity might constitute a deterrent to entry (Vickers, 1985). The substantially higher unit costs (and therefore prices) implied by such undercapacity utilisation, which had not attracted new entry, may be indicative of the height of the aggregate entry barrier.

uncertainty about the values of η and p_m,[9] these results should be subjected to sensitivity tests. It turns out that W, but not T, is sensitive to the size of η. For example, at η = 0.5 (with p_m = 95 c/l) q_m = 87.820 m.l., W = \$49,875 and T = \$4,391,000. This variation in W is unlikely to change the out come of the net social benefit test except in very marginal cases. However, both W and T are sensitive to the value of p_m, and hence to the estimated height of entry barriers. For example, if short run profit maximisation is assumed (with η = 1 at p_c), then P_m = 135 c/l, q_m = 44.9075 m.l., W = \$10,104,187 and T = \$20,208,375.

The Public Benefit

Two main public benefits were generally accepted by the Commerce Commission. The first was the cost savings from the rationalisation of transport, plant, staff, services, and the like that NZCDC believed would result from the merger. These were estimated at \$2,202,570 per year, equivalent to 2.60 c/l on the price with sales of q_m = 84.825. This is one factor causing the cost curve c_2 to be lower than C_1 in Figure 1.

The second public benefit stemmed from the faster introduction of a more realistic pricing mechanism for, and hence improved efficiency in the supply of, town milk. The producer price for town milk was on average about 50% higher than for manufacturing milk, a situation only partly justified by the higher costs of winter milk supply (Industries Development Commission, 1985, pp.12-14). NZCDC wanted to speed up the absorption of town milk into dairy manufacturing by introducing a Winter Milk Supply Scheme among its manufacturing suppliers. The Scheme was technically viable under suitable conditions, but economic

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9. No attempt was made to estimate η, although demand was felt to be "fairly inelastic" (para 7.7). Bollard (1988, p.5) cited a 1984 econometric estimate of -0.066, but suggested that it might be outdated. Different estimates for transport costs by the opposing parties in the case were never reconciled. The limitations of the model, in particular the assumption of constant unit costs, should also be noted.

success was less certain. However, NZCDC estimated potential savings over the year in excess of six c/l, assuming a winter premium averaging 2.4 c/l over the year. But NZCDC felt that the separate operation of ACMP would cause resistance to the Winter Milk Supply Scheme, because of town milk suppliers' preferences for the traditional pricing system. Such resistance was expected to dissipate once ACMP's supplier-shareholders became part of the much larger NZCDC. The public benefit of the merger lay in the accelerated development of the Winter Milk Supply Scheme, and hence in the accrual of efficiency gains.[10] While immediate implementation of the Scheme was impractical, NZCDC believed a delay of "several years" was likely without the merger.

To make a "ballpark" estimate of the potential efficiency gains, both periods are telescoped. Assume that with no merger the Winter Milk Supply Scheme is introduced gradually between 1989 and 1994. With one-sixth of the Auckland milk supply of Q_m = 84.825 m.l joining the Scheme each year, the resource savings are shown in row (1) of Table 1. With the merger, the Winter Milk Supply Scheme is introduced quickly over the shorter period 1989-91. The resulting savings are given in row (2). Deducting row (1) from row (2) gives the net savings from the merger (row (3)). These are discounted at an assumed social time preference rate of 10% in row (4) to produce a present value (PV) of savings of $4,298,253.

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10. The Commerce Commission cited the "clear consensus" view that town milk supplies were over-priced, and that the inefficiencies appear to have evolved as a result of the high protection of the industry. The implication seems to be that if the inefficiencies can be blamed on regulation, and deregulation is government policy, then any adverse consequences of deregulation on producers cannot be attributed to the merger for facilitating that policy.

TABLE 1

An Estimate of the Net Savings From the Faster Implementation of the WMSS

		1989	1990	1991	1992	1993	1994
(1) Savings without	- per litre	1 cent	2 cents	3 cents	4 cents	5 cents	6 cents
the merger	- in total	$848,250	1,696,500 -	2,544,750	3,393,000	4,241,250	5,089,500
(2) Savings with	- per litre	1 cent	3 cents	6 cents	6 cents	6 cents	6 cents
the merger	- in total	$848,250	2,544,750	5,089,500	5,089,500	5,089,500	5,089,500
(3) Net savings	- per litre	0 cents	1 cent	3 cents	2 cents	1 cent	0 cents
with merger	- in total	$ 0	848,250	2,544,750	1,696,500	848,250	0
(4) Net savings in (3) discounted at 10%		$ 0	700,994	1,911,871	1,158,710	526,678	0

The Net Social Benefit Test

For the net social benefit test the estimates are converted to present values by assuming that all (except the last) accrue in perpetuity. Hence: $PV(W) = -\$1,247,500$; $PV(T_c) = \$412,500$; $PV(T_p) = \$42,412,500$; $PV(E_1) = \$22,025,700$; and $PV(E_2) = \$4,298,253$. The proposal's opponents argued that the strengthening of dominance in the merged company would reduce the competitive pressure to lower prices, and so to pass on to consumers the claimed cost savings. Auckland milk consumers might incur a price penalty, and also not benefit from efficiency gains - the consumer welfare argument used by the Commerce Commission in condemning *Goodman Fielder/Wattie* and *FCL/NZFP*. In *NZCDC/ACMP* those value judgement would favour the weights used in equation (1) (excepted that $\alpha > 0$), which would almost certainly produce a negative net social benefit.

However, this precedent was overturned. The Commerce Commission acknowledged that dominance weakens the relative position of consumers, but stated that the Commerce Act sets no distributive standard. For example, it allows the public benefit from the whole proposal to be weighed against the detriment arising only in those markets in which dominance is acquired or strengthened. The Commerce Commission is therefore not required to deny a public benefit claim because it will not flow to certain groups of the public, particularly consumers. Under this efficiency standard, where unit weights mean that $PV(T_c)$ and $PV(T_p)$ are ignored, the net social benefit is strongly positive, ie. $PV(W) < PV(E_1) + PV(E_2)$.

Postscript

Following the *NZCDC/ACMP* Decision in May 1988, Auckland milk prices were increased twice before the end of the year, but the overall increase of 11.1% (from 90 to 100c/l) was very similar to the one step increase in the Wellington price of 10.5% (from 95 to 105 c/l). Milk processors claimed that the increases were necessary to keep payments to town milk producers in line with the rise in the export based prices to manufacturing milk suppliers. According to industry sources, by the year

end the two processing plants in Auckland were still operating separately with little apparent effort to rationalist production.

5.5 Implications of the Efficiency Approach

A disquieting feature of the *NZCDC/ACMP* Decision is that a merger proposal to form a pure monopoly in a significant market was sanctioned under an Act whose objective is to promote competition. This arose because of the emphasis placed on economic efficiency in the composite standard, and the fact that promoting efficiency is not always compatible with maintaining competition.[11] A competition-reducing dominant firm, cartel or merger may still yield a positive net benefit if it can gain economies not available to smaller or non-colluding or non-merging firms. However, there are problems inherent in measuring efficiency changes which tend to bias net social benefit judgements against competition. Several factors (some evident in *NZCDC/ACMP*) are involved.

Firstly, claims of improved productive efficiency are likely to be exaggerated, especially in merger proposals where such gains are prospective. Scherer (1980, pp.545-46) stressed that participants, being aware that their proposal's acceptability depends upon the promotion of efficiency, have an incentive to be optimistic.[12] Even in the absence of

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11. The two are often considered synonymous, however. In discussing the long title of the Act, the Department of Trade and Industry (1988, p.12) stated: "The promotion of competition is consistent with the enhancement of efficiency, and is a distinct objective which more accurately describes the Commerce Act's purpose."

12. That merger proponents will adapt their arguments to suit antitrust requirements even in perverse circumstances is shown by United States experience. In the past the enforcement agencies sometimes took the misguided view that efficiencies were anticompetitive because of the advantage conferred on the merged firm, and so should count against mergers. Firms then strenuously denied that their proposed mergers would produce efficiency gains (Fisher and Lande, 1983, pp.1582-83).

dissembling, uncertainty about future gains means that estimates are error prone. Scherer cites cases of hopelessly inaccurate business forecasts, as does Brodley (1977, esp. fn. 251, p.64). Moreover, the enforcement agency's ability to challenge such forecasts is limited because the participants are the main source of information, (Williamson 1977, p.240) wrote:

> "Although the government and the defendant have roughly equal access to market share statistics, and can present, interpret, and contest such data equally well, the same is not true with respect to a purported economies defense. Here the data are distributed unevenly to the strategic advantage of the defendant ... Not only can the defendant use its information advantage by disclosing the data in a selective way, but advocacy legitimises such disclosure. Unless the government can demonstrate that the data are incomplete or significantly distorted, which may not be easy, the advocacy process is poorly suited for purposes of getting a balanced presentation of the evidence before the court."

Hence, the Commerce Commission's decision in *NZCDC/ACMP* to refuse opponents access to the "commercially sensitive" estimates of rationalisation savings was regrettable, since the opponents' greater knowledge of the dairy industry made them potentially better critics than the Commerce Commission. While the Commerce Commission accepted that the merger would facilitate "immediate rationalisation", the participants' resolve to improve efficiency might have been questioned; apparently they had not sought individually to reduce the 50% underutilisation of their milk processing plants, and rationalisation that involves the integration of geographically separate plants is difficult and may be subject to considerable delays (Pickford, 1987a). Finally, overseas' studies of mergers suggest that rationalisation may frequently be unsuccessful, in that a substantial proportion, if not a majority, experience poor performance post-merger as measured variously by adverse financial effects, loss of market share, reduced profitability and poor productivity (Greer, 1988, pp.55-56).

Fisher and Lande (1983, p.1693) reach the following assessment:

> "Individual case studies and inductive analysis ... show that many individual mergers have created substantial inefficiencies, many others have been fiascos, and the record of predictions for individual cases has been shockingly poor - too poor to inspire confidence that any prediction of the level of cost savings could be sufficiently accurate to be a major basis of public policy."

In all, a much more sceptical stance on company efficiency claims seems appropriate. Even with a tougher policy the number of merger proposals likely to be proscribed is small. In the first 23 months of the Act's operation between 1 May 1986 and 31 March 1988 the Commerce Commission registered 833 merger applications, of which only 53 (6.4%) proceeded to the authorisation stage (Department of Trade and Industry, 1988, pp.10-11).[13] Moreover, it is much easier to deal with monopoly power by denying monopoly-enhancing mergers than to tackle an established monopoly position. As Scherer put it, the eggs once scrambled are difficult to unscramble.

Secondly, firms that increase market power by merger may actually suffer a loss of productive efficiency (ie. a rise in X-inefficiency). The Commerce Commission recognised this possibility in *NZCDC/ACMP*. After discussing allocative efficiency it went on to state (para. 8.4):

> "A more dynamic view of the competitive process would suggest that, in the absence of competition, there is likely to be a dampening of incentives to ensure product and service quality, innovation and, generally, sound managerial performance."

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13. The remaining 780 were classified as follows: 700 were given clearance to proceed; 47 were not notifiable or were withdrawn; and 33 were to be decided as at 31 March 1988.

Comanor and Leibenstein (1969) showed, using a diagram similar to Figure 1, that X-inefficiency can generate much larger welfare losses than monopoly pricing. If c_2 represents costs with efficient resource use, c_1 shows costs with X-inefficiency, and the monopoly markup p_cp_m equals the X-inefficiency cost increment p_ep_c, the resulting allocative efficiency loss triangle AGF is four times the size of W. In addition, inefficient resource use causes a loss equal to rectangle E.

There is evidence to link X-inefficiency with an absence of competition. Primeaux (1977) examined the cost-structure of United States local, municipally owned, electric utility companies. Most faced no competition, but in 49 cities he found a private sector competitor in 1966. The cost structures of those municipally-owned companies facing competition were compared with others that did not. Using multiple regression analysis, he found that after allowing for many other factors that might influence costs, the presence of competition reduced production cost per kilowatt-hour of electricity by ten and three quarters percent on average. Erickson (1976) found that price fixing conspiracies in the United States gymnasium seating, rock salt and structural steel industries caused firms' costs to rise significantly, in the first by 23%. Similarly, Scherer (1980, pp.464-65) noted the salutory impact on efficiency of the exposure of the British glass bottle industry to competition following the breakdown of a price-fixing cartel. After a survey of several such studies, Siegfried and Wheeler (1981) concluded that the evidence does support the hypothesis that more competition yields greater cost efficiency, and that "the social cost of X-inefficiency appears to be substantial."

Thirdly, a further potential efficiency loss associated with market power concerns the Tullock (1967)-Posner (1975) argument that competition for a monopoly position encourages potential entrants to spend resources up to the value of prospective profits to be earned on entry to gain entry, and incumbent firms to devote resources up to the size of monopoly profits being earned to keep them out. Siegfried and Wheeler (1981) considered that the "theoretical logic is compelling", even though empirical studies were lacking. Rent-seeking may be manifested in the

organisation of collusive pricing, lobbying legislators to introduce competition-reducing controls, and raising artificial entry barriers to deter new entrants. In NZCDC/ACMP Bollard (1988, p.26) found evidence of rent-seeking by merger:

> "... the offer to ACMP by NZCDC appears to include ... a significant premium on the price of shares ... I interpret this as being a reflection of monopoly profits that might be enjoyed by the merged concern."

The rectangle T can then no longer be regarded as a neutral transfer, but rather as a rough indicator of the magnitude of socially wasted resources, when it should figure in the net social benefit test as a detriment. The relatively large size of T would tilt the net social benefit judgement decisively against authorisation in many cases. Moreover, arguments put forward by Siegfried (1978) suggest that the rectangle may tend to understate the social loss from rent seeking. Since the rectangle shows the amount of pre-entry profits the incumbent stands to lose from entry, it represents the maximum resources (although expenditure of the maximum may not be necessary) that the firm would devote to deterring new entry. This excludes the resources wasted by potential entrants.

Fourthly, the well known difficulty of measuring the height of entry barriers (eg. Brodley, 1977) may lead to an understatement of monopoly price effects. This difficulty was evident in *NZCDC/ACMP*, where the Commerce Commission evaluated only one of the entry barriers (transport costs) in determining the size of the possible price increase under monopoly. As indicated above, the sizes of both W and T increase sharply with larger monopoly price markups.

Fifthly, the sizes of W and T are also influenced by the assumption of pre-merger competitive pricing. The model's realism can be improved by allowing the two firms to exercise market power prior to merger (Deprano and Nugent, 1969). This seems to have been the case with the *NZCDC/ACMP* merger:

"The Commission accepts that ... regulation ... has substantially dulled the incentives for and practice of competitive behaviour. This could suggest that present price levels are already higher than competitive levels ... In other words, regulatory, structural and behavioural factors all lend support to the proposition that ... ACMP and NZCDC together are currently dominant in the defined market." (Commerce Commission, 1988, para. 7.19-7.20)

Reinterpreting Figure 1, suppose that pre-merger the cost curve is c_2, with price P_c and output q_c, giving monopoly profits of P_cBHp_e. Post-merger, enhanced market power causes price to rise to p_m and output to fall to q_m. The loss of allocative efficiency is then not limited to triangle ABC; it also includes the lost producers' surplus, rectangle CBHG. If, for example, the pre-merger monopoly price markup p_ep_c is half the post-merger markup p_ep_m, the triangle and rectangle combined is three times larger than the triangle alone. Similarly, by overlooking the pre-merger monopoly pricing, the size of the income transfer will be assessed as rectangle T, rather than the potentially much larger sum of rectangles T and E.

Finally, because of its large relative size, the treatment of T - as reflected in the weights attached to income change of different groups - is crucial to the net social benefit test. Under an efficiency standard with uniform unit weights, T is ignored. But even a small departure from those weights - perhaps in favour of consumers, who might be expected to have lower average incomes and hence higher marginal utilities than company shareholders - could reverse the net social benefit judgement. The argument favouring unit weights has been put by Williamson (1969, p.108):

"... antitrust is poorly suited to advance redistributional objectives. Macroeconomic policy instruments (taxes, transfers, expenditures) with which to correct distributional conditions are not only available but are superior to the use of antitrust for this purpose. Typically these instruments involve the promotion of regional development, subsidising a group that is involved in

a transitional adjustment, alleviating conditions of poverty, etc., and are applied on a broad scale. Antitrust, by contrast is concerned with industry conditions of a much more local variety."

Martin (1988, p.507) has replied that in the United States, antitrust traditionally has been concerned not with the income of particular groups, but rather with the prevention of income transfers due to the exercise of market power *from consumers*, regardless of their income levels. Antitrust can be more precisely targetted at remedying these income transfers than can macroeconomic policy. This approach seems to rest on a value judgement that monopoly pricing is "unfair", and that the resulting monopoly profits should not therefore be accorded an equal weight in the net social benefit test.

To sum up, claims of productive efficiency gains from mergers are likely to be exaggerated, and other adverse productive and allocative efficiency effects may be overlooked, or are difficult to measure and hence may be given insufficient weight. One crude way of redressing this bias in the application of the net social benefit test - on the grounds that both the bias and of T may increase with monopoly power - is to adopt the weighting system used in equation (1), whereby T is treated as having a net negative impact.

6. New Zealand Merger Policy[14]

In the previous section we showed that the adoption of efficiency as the principal objective of competition policy would lead to a more permissive stance on mergers that enhance market power. This would be superimposed upon a merger policy that is arguably already lenient. Case histories suggest that, as a rough rule-of-thumb, all mergers up to

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14. I am indebted to Douglas Greer, whose suggestions led to the analysis in this and the following sections.

duopoly are acceptable on competition grounds, and that the anticompetitive effects of merger to monopoly (even where entry barriers are high) may be overridden if efficiency benefits are sufficiently compelling.

The leniency of the current policy seems to stem from three factors. Firstly, the interpretation of dominance is such that very large market shares - in excess of 50% - may be required to achieve such a position, particularly when entry barriers are thought not to be high enough to restrain potential competition. Mergers involving much smaller aggregations of market share are routinely challenged by the Justice Department in the United States. Secondly, attempts by companies to use mergers to gain scale economies in the small New Zealand market, especially where this would improve international competitiveness, tend to be viewed sympathetically. Finally, leniency is supported by Australian precedents under similar legislation. In a 1986 paper the chairman of the Australian Trade Practices Commission stated that mergers not justified on efficiency grounds would not normally be challenged where "after the merger there are at least two well matched competitors remaining in the market"; and, where only one major competitor remains, "there is a number of other local competitors who are viable", or "that corporation faces effective competition from imports." (quoted in Brunt, 1986, p.296).

For firms bent on gaining market power, the lenient merger policy may open up a route for the two step attainment of monopoly through successive mergers. The first step involves mergers to form a duopoly, which escape the dominance standard on the grounds that duopoly equates with competition (the beer duopoly is a good example). In the second step the duopolists are allowed to merge on the basis that efficiency gains (which may not be large) outweigh adverse price effects, which are limited because competition is already weak. This balance of effects is evident (in circumstances admittedly made unusual by regulation) in the *NZCDC/ACMP* Decision quoted above.[15] Merger in

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15. The *Wrightson NMA/Dalgety Crown* takeover in 1986 (Commerce Commission Decision No 172) may be a similar case.

monopoly may have little anticompetitive effect on price, because tacit collusion between the duopolists may already result in price being at, or close to, the monopoly level. The unwillingness of the Australian courts to infer such pricing conduct, under provisions in the Trade Practices Act similar to those in the Commerce Act, has been criticised by economists (Miller and Round, 1982). An illustration in New Zealand of the apparent emergence of price leadership, following the lifting of price controls on the cement industry duopoly, is charted by Miller *et al* (1987, pp.16-19). Similar parallel pricing was also evident in the Auckland milk duopoly:

> "While (the two companies) have not ... competed directly against each other, there is some evidence that they provide some constraint on each other's behaviour. Both companies have increased the price ... once since effective price controls were lifted on 1 September 1987. That increase was from the same price (45c a bottle) by the same amount (5c) and occurred on the same data (1 January 1988)." (Commerce Commission, 1988, para 6.26)

A further criticism of this lenient approach concerns the reliance on potential competition from imports in disciplining a dominant domestic firm. Even in the absence of artificial restrictions on trade, the natural protection afforded by international freight and insurance charges can be high. For a wide range of imported goods these charges averaged 10.8% of the foreign price in 1985 (Pickford, 1987b, p.80), implying that for homogeneous goods a domestic monopolist could on average raise price by over 10% before inducing entry.

5.7 A Policy Proposal

The implementation of a competition policy often involves a tradeoff between economic efficiency and consumer welfare/competition. If efficiency is emphasised, then consumer welfare may suffer from higher prices caused by reduced competition; if consumer welfare is favoured, then anticompetitive but efficiency-enhancing mergers may be barred.

The efficiency and consumer welfare (but not the competition) objectives might be reconciled if post-merger the price did not rise. Efficiency gains would be realised, yet consumer welfare would not decline. This socially advantageous outcome might arise under two rather different circumstances.

The first is explored by Fisher, Lande and Vandaele (1983). They proposed that the standard for antitrust enforcement in the United States be the maximisation of efficiency subject to a zero income transfer constraint. The constraint reflects the generally accepted view that the principal concern of Congress in passing the antitrust laws was to prevent unfair transfers of income from consumers to firms (Lande, 1982; Martin, 1988, pp.48-60). Since any post-merger increase in price would breach the constraint, the Williamson tradeoff is no longer appropriate. But this need not mean that all mergers which enhance market power and efficiency should be barred. Fisher *et al* took the extreme case, where a competitive industry (producing at p_c, q_c in Figure 1) is transformed by merger into a monopoly, and asked: what post-merger reduction in cost would ensure that the short run profit maximising price equals P_c? Not surprisingly, it emerged that "extraordinarily large cost savings" were needed to satisfy the price constraint; even with a price elasticity of demand at p_c as high as 4, a 25% cost reduction would be required. Although under less extreme assumptions a merger that increased market power could lead to an unchanged price with smaller efficiency gains, it seems that many mergers offering significant efficiencies would be proscribed under this standard.

An alternative approach by which the post-merger price could be constrained to p_c involves regulation. Mergers that would lead to the acquisition or strengthening of dominance,but which claim significant efficiency gains, could be authorised subject to the condition that post-merger the price is cut and subsequently controlled. In Figure 1, under a perfect policy, the controlled price would be set at p_e, and the dominant firm's output would in consequence be q_e. An advantage of this proposal is that all (or, with a less than perfect policy, most) of the productive efficiency gains would be passed on to consumers through

the lowered price. The proposal also takes into account to some degree the ease with which merging firms might exaggerate efficiency gains - it would force them to research such gains more fully at the pre-merger planning stage to be sure that they exist - and the enforcement of the lower price would encourage the rapid implementation of planned rationalisation schemes.

The proposal raises various problems. One centres on determining the size of the price cut, which as a minimum would have to take into account prospective efficiency gains, and might also be extended to include any X-inefficiencies and excess profits that are incorporated in the pre-merger price. However, the difficulties of implementing such efficiency arguments have often been used to justify proxy rule approaches in antitrust (Brodley, 1977; Fisher and Lande, 1983; Leffler, 1985). One such approach would be to impose a given reduction in price, of say 2%, in all cases. A second problem relates to the ongoing regulation of price to curb the merged firm's new found market power. This would sit uneasily with the current government policy of deregulation, although price control regulations are retained as Part IV of the Act, and are seen "as an important last resort mechanism to deal with problems arising from market dominance." (Department of Trade and Industry, 1988, p.52).[16] The likely distortionary impact and inefficiencies of price controls (eg. Tower, 1979; Miller *et al* 1987, pp.13-16) would have to be weighed against the gains in efficiency and consumer welfare.

5.8 Conclusions

The subject of this paper has been the aims of competition policy in New Zealand. The Commerce Act's explicit promotion of the competition goal has been interpreted to include consumer welfare and

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16. It is noteworthy that regulatory antitrust is not unknown even in the United States (see Posner, 1970, pp.386-88).

economic efficiency objectives. However, the Williamson model demonstrates that the efficiency objective can sometimes conflict with the other two. The qualification to the Act's pro-competitive stance is thus justified where mergers, for example, yield efficiency benefits larger than the detriments from less competition and consumer welfare. But the Act does not define benefits and detriments; most troublesome of all, it sets no distributional standard. As a result, inconsistencies have emerged in the application of the net social benefit test. In *Goodman Fielder/Wattie* and *FCL/NZFP* the Commerce Commission favoured consumer welfare, whereas subsequently in *NZCDC/ACMP* it emphasised efficiency.[17] Consequently, the effectiveness of competition policy is in danger of being blunted. Because competition cases are expensive, complicated and time consuming - even given the streamlined procedures employed by the Commerce Commission - relatively few can be examined. Competition policy is therefore most effective where it causes changes in business behaviour at the planning stage, and that is most likely to occur where the legal standards are clear and precise (Brodley, 1977, p.6).

In the United States the conflict between objectives is resolved in favour of preserving competition and consumer welfare. Hence the difficulties posed by efficiency arguments do not arise. These include the likely exaggeration of efficiency gains by firms seeking approval for their proposed merger, and the probable overlooking or understatement of losses because of their insidious nature. But in small countries like New Zealand this approach could impose too high a cost, in terms of

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17. It is unlikely that *NZCDC/ACMP* reflects a shift by the Commerce Commission towards the efficiency objective. Rather it may be an example of G C Allen's dictum (when commenting on a similar lack of guidelines under the British legislation) that "members of the Commission will reach their conclusions by reference to 'assumptions, principles or prejudices' which their training and experience causes them to apply to economic affairs." Quoted by Ricketts in Bornholdt *et al* (1978).

efficiency gains foregone, when market power enhancing mergers are blocked. A way needs to be found of ensuring the mergers do generate net efficiency gains, and at the same time prevents the merged firm from exploiting its newly acquired market power by raising price, and thereby reducing consumer welfare. One proposal which seems to satisfy both requirements reasonably well, although at the expense of some regulatory inefficiencies, is to subject mergers requiring authorisation under the present Act to the imposition of a reduced and controlled price. Under this policy firms would not propose competition-reducing mergers that did not produce realisable economies, and mergers that were authorised would increase consumer welfare. Competition would suffer, although perhaps no more than under the present policy which appears to equate duopoly with competition.

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CHAPTER SIX

PRICE FIXING, PRICE SETTING, AND COMPETITION POLICY

Richard Miller

6.1 Deregulation and Pricing

From the mid 1930s and continuing for half a century in New Zealand, government agencies set or approved the prices at which many market transactions took place. Recently, regulation of market prices has been abandoned as a general policy. Starting in 1984, when the Labour Government allowed deregulation to spread from market to market throughout New Zealand, managerial judgement and business discretion on prices and price policy have replaced the suppressive visible hands and feet of Wellington bureaucracy. Almost simultaneously the Commerce Act of 1986 affirmed the policy of competitive rivalry in free markets and established procedures "to promote competition in markets within New Zealand."[1].

Business people long accustomed to price controls in regulated markets have begun to adopt methods of establishing the terms of conditions of market exchanges, including prices. In markets long accustomed to no regulation, business pricing practices have evolved in various and diverse ways. Many of these practices reflect competitive rivalry as independent business people strive for a competitive advantage. Other pricing practices, however, serve as devices that aid in collusion as

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1. The static theoretical conditions supporting a policy of competition are widely known. For an exposition: F M Scherer (1980), appendix to chapter 2. Many economists consider the static conditions to be irrelevant, preferring to emphasise benefits of dynamic, competitive rivalry: J A Schumpeter (1950), I M Kirzner (1973), ch. 103; and R M Fisher, J J McGowen and J E Greenwood (1983), ch. 2.

mechanisms that foster the monopolistic effects of supply restrictions and high prices. This article reviews a number of pricing practices in free unregulated markets, observing first some theoretical considerations, then some examples from the US experience, finally several matters regarding competition policy in the US and in New Zealand.

6.2 The Pricing Process

Competition policy should serve to preserve the rivalry in competitive markets, to ensure that the structure of the market and the behaviour of its participants involves rivalry not collusion, competition not monopoly. A direct method of blunting such rivalry involves agreements among suppliers on the price (or price structure) which they offer to customers. Such an agreement necessarily involves an increase above what the price would otherwise be; a joint conspiracy is not necessary if a firm wants to offer a lower price. If effective, such a price fixing agreement undermines the competitive process. Under a price fixing agreement (as with any monopolising technique), with a higher price, society suffers the dead-weight loss in consumer's surplus. In addition costs of production, subject to less competitive discipline, may be too high; resources may be wasted through X-inefficiency. Also, technical change may be retarded, and the price fixing monopolists may reap excess profit.[2]

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2. That is, earn higher profit or suffer smaller loss. In some industries firms have responded to depressed conditions and negative profits by forming price fixing conspiracies. N R Lamoreaux (1985) argues that in a number of US industries the economic depression of 1893-1898 caused price fixing cartels to form (to reduce losses). Severe price competition had evolved, and the merger wave of 1895-1904 in the US reflected the ineffective character of the cartels. The general principle may be simply noted: if all else fails to improve profits, conspire on price.

Economic models describe the price fixing process. Done properly (by suppliers' standards) the agreement will maximise the suppliers' joint profits, perhaps aided by side payments to silence a dissident supplier, and certainly modified to take into account the long run considerations of possible future entry of additional suppliers and their effect on market price and profits. Absent collusive price fixing, other economic models describe the process by which firms set their own prices, given the market conditions which each firm perceives as its own.

Markups and Marginalism

Early studies of pricing by business firms suggested that businesspeople establish price by a rule of thumb: direct (unit) costs plus a percentage markup. Originally viewed as inconsistent with the economist's marginal cost-marginal revenue approach, the "cost-plus-markup" procedure is now interpreted as identical to marginalism.[3] Price depends on average cost (often average direct cost) and the price elasticity of demand; markup is smaller the greater is the elasticity of demand which the firm

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3. Expand the definition of marginal revenue:

$$MR = \frac{d\,(P.Q)}{dQ} = P + Q\frac{dP}{dQ} = P\left(1 + \frac{Q}{P}\frac{dP}{dQ}\right) = P\left(1 + \frac{1}{e}\right)$$

where e = price elasticity of demand.

Rearrange: $P = MR\left(\frac{e}{e+1}\right)$.

Assume (a) MR = MC (profit maximisation) and (b) MC = AC (horizontal direct unit cost), then

$P = AC\left(\frac{e}{e+1}\right)$ or $\frac{P-AC}{P} = -\frac{1}{e}$.

The markup over direct unit cost (AC) depends on e. If e = -2, the mark up is 100%;

if e = -3, the markup is 50%. If e = - 0, P = AC = MC (perfect competition). This was pointed out by Tarshis (1947, pp 198-200).

faces. In a more complicated analysis, Cowling and Waterson (1976). extend the argument to include an index of market structure (the Herfindahl-Hirschman index) and measures of oligopolists' reactions, as well as elasticity, as determinants of an industry's price-cost margin. Thus, the businessperson's markup over direct cost (a price-cost margin) can be interpreted as profit maximisation in a one period (static) context.

Oligopolistic Interdependence in Theory

The reactions of firms to other firms' decisions within an oligopolistic market have been modeled by economists in various ways. Cournot (1838) assumed that each firm would choose its output assuming that other firms' output would remain unchanged. Bertrand (1883) made an analogous assumption with regard to price. F Y Edgeworth (1897) argued that price would oscillate between the monopoly level and the competitive level. Chamberlin (1929, 1933) assumed that if firms in an industry were few (enough), they would arrange for market shares and price to produce a maximised industry profit, somehow distributed among the participants. Cournot's result was an industry output, price and profit lying between a competitive result and a perfect monopoly result. Bertrand's result was a deterioration of price to the competitive level, with associated output and profit. If a single firm is considerably larger than any of its market rivals, it may act as a monopolist - a dominant firm monopolist - by taking into consideration the supply responses of its smaller rivals when it sets its price and output policy. Chamberlin produced an oligopoly result which (if attained) is identical to that of a single monopoly firm with multiple plants; price and plant shares (like market shares for separate firms) would maximise the joint (aggregate) profit of all firms by setting the monopoly price and concurrently minimising cost by producing efficiently. Fellner (1949) argued for a qualified joint profit maximisation solution to oligopoly, with limitations imposed by need to consider safety margins, uncertainty, and the "long run". The arrangement which might produce or approximate this joint profit maximisation result could be, at least in theory, either a tacit understanding in a concentrated or oligopolistic

market, or it could be a collusive, explicit agreement on price and market (and profit) shares.

However, firms with discretion over their prices do not price without regard to tomorrow. If today's price (set at a high and very profitable level) will induce a rush of new competitors to compete away those profits, perhaps the firm will set price more modestly, still earning economic profits but also inducing slower entry and thus preserving some profit for tomorrow. Various economists have suggested a lower limit to the pricing process by established sellers, asking (under various conditions) what is the highest price which incumbent sellers can set and not attract entry (Bain, 1949; Modigliani (1958). This "limit price" need not and in general will not be optimal for the incumbent firms. The pricing process for established sellers should consider profits beyond today (or this year) and how current policies (including price policy) affect future profitability. The optimum current policy is to set today's price (indeed, to plan to set the trajectory or path of prices into the future) to maximise the present value (discounted to today) of future profits. Gaskins (1971) notes that a dominant firm faced with potential and actual entry will experience a declining market share; i.e. declining "dominance" is perfectly consistent with profit maximisation in a present value sense. A price policy (trajectory of prices) will maximise present value of the dominant firm and will allow or induce entry at a rate which is optimal for the dominant firm, given the rates at which entry will occur under alternative price policies.

The difficulties which potential rivals face in entering an industry in response to profit opportunities influence greatly the ability of incumbent firms to set a price above longrun costs and thus to behave in a monopolistic manner. Such "barriers to entry" (Bain, 1956; Stigler (1968) may completely foreclose entry, as in the case of licensing and of some patents. Or entry may be possible but difficult, because of incumbents' control of essential inputs, e.g. raw materials or production secrets, or entry may be relatively easy, in the theoretical extreme "contestable". The more difficult entry is, the more latitude incumbent firms possess in the setting of their price policies. In the extreme, a truly contestable market[4] displays the performance of perfect competition:

even a single firm is disciplined by potential entry to set the competitive price.[5]

Oligopolistic Interdependence in Markets

What of the real world? It should be noted that the search for profit drives the system. Businesspeople pick price and production policies to gain revenue net of costs, considering long run effects by marginal calculations in present value terms. The search for profit (or net worth)

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4. A theoretical extreme, like perfect competition, not found, but perhaps occasionally approached, in real markets. Greer paper, this volume. Contestability was developed in theory as an offshoot of airline deregulation in the US. W J Baumol, J C Panzar, R D Willig (1982), For an alternative view and an evaluation : W G Shepherd, (1984).

5. Occasionally one reads an economist's complaint that economists have not generally developed (or agreed to) a single oligopoly model to describe all oligopolistic markets. This lament is wide of the mark. The crowd of oligopoly models reflects the diversity of market conditions. Consider a single example, the world market for crude oil. At least three of our current models are necessary to describe the various aspects of this market. (1) OPEC - the Organisation of Petroleum Exporting Countries - is a cartel of firms which attempt to establish a price and a set of country quotas which maximize the countries' (firms') joint profit; the disagreements over the individual quotas mirror dissatisfaction with individual profit shares. (2) OPEC faces the world demand for oil reduced by the supply from non-OPEC producers. (3) Higher prices for oil call forth more rapid growth in non-OPEC supply, through faster pumping from existing wells, enhanced recovery techniques, and greater drilling activity. Thus the world oil market is modelled by collusive oligopoly (Chamberlin), the dominant firm, and the Gaskins entry model, corresponding respectively to 1, 2, 3.

is limited by consumers' demands, by production costs, and by rivals' actions in the same (or nearby) markets. The "oligopoly problem" reflects the monopoly-like results in an oligopolistic setting, whether a small group of firms somehow participating in the market can establish price(s) and output(s) in the market that reflect the restricted output and higher price of monopoly power when compared with the results in a competitive market. Every firm must adopt a price policy, even if it is a simple follow the leader, and many firms' policies can be described as cost-plus,[6] where the "plus" depends on demand elasticity, and the sizes and reactions of rival firms.

Price Leadership

Often some form of price leadership emerges in oligopolistic markets; the largest firm, or one of the largest, may set the market price which all firms then emulate. Actually price leadership describes the situation in which one firm in a market announces (advertises) its price or a change in price before others announce theirs, and the others then follow the first. A price change may be announced in advance, to become effective not at the announcement date but at some later date; the priceleader may want to see if the others follow. Three forms of price leadership are generally recognised (Markham, 1951), and they are based on three of the economist's market models.

(i) Barometic price leadership: in a workably competitive market, perhaps despite the structural oligopoly of few firms and high market shares, the price leader merely reflects his perception of changed market conditions, as when cost or demand shifts. Prices should reflect such changes, and the leader is merely first to make the change, not exercising monopoly power on behalf of himself or of the group. The analogy is with changes in atmospheric pressure and the barometer,

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6. Even if profits are negative; if revenue does not cover variable cost, the firm shuts down.

which only reflects changed pressure without exerting any influence on the weather.

(ii) Dominant firm price leadership: a single large firm, with a substantial share of market output, may set the equivalent of a monopoly price, considering his demand to be the market demand less the output produced by the smaller firms in the market. Clearly the dominant firm possesses and exercises monopoly power: price and output deviate from the results of competitive rivalry, as market price is raised and output restricted when compared with competition.

(iii) Collusive price leadership: the price leader sets his price as an approximation to the price that would prevail if all firms colluded - conspired by communicating and agreeing - on price (and on market shares and the division of profits). No direct communication needs to exist, however; the agreement or understanding is on the identity of the price leader(s) and on the leadership - following arrangement as a substitute for conspiratorial communication. Clearly *some* information needs to flow among the firms; the followers need knowledge of the price(s) set by the leader, who necessarily announces his new price(s) to the customers (and perhaps, too, the trade press).

Indices of Monopoly power

How can the possession and exercise of monopoly power be identified? Structural conditions - high market shares, high concentration - provide a place to start, but are insufficient by themselves.[7] And occasionally monopolistic agreements have been attempted, usually unsuccessfully

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7. The calculation of market shares and market concentration indices presupposes that the market has been adequately identified by economic criteria including crosselasticities of supply and demand. Often this is difficult; frequently disagreements arise; and always the task is important. See D Round, (papers this volume).

save for governmental assistance, in unconcentrated industries.[8] This list is suggestive and includes some major sorts of indications.

(i) High prices in relation to costs; high profit rates. This, after all, is the object of firms' pricing behaviour, and high and persistent profits suggest that a barrier or impediment exists to the flow of resources. On the other hand, cartels may be formed in sick industries, to prevent profits or losses from getting worse, and exorbitant profits may not be realised. And high profits may reflect luck, superior resources including management, or legal monopoly.

(ii) The hot document, the willing witness. Conspiratorial evidence in written form from members' files, and orally from disgruntled employees, provides dates, subjects, results, and participants to the direct meetings. Most conspiracies do not employ the services of a recording secretary or a documents clerk where cartels are illegal.

(iii) Constancy of market shares. Any understanding on price (no matter how derived) presumes that the division of the aggregate industry profit is satisfactory to the industry members. Usually this requires that the firms also find their market shares acceptable. If not, then some of the firms will undoubtedly seek an increased market share through rivalry of some sort, possibly through lower prices secretly offered to rivals' customers. When such attempts are successful, then market shares will alter or shift over time. If no (or few) such forays are attempted, indicating satisfaction with individual market and profit shares, then those shares will exhibit constancy over time. In this manner stability of market shares suggests an underlying understanding among industry members.

(iv) Uniformity of market prices. Of crucial importance is the distinction between list prices and market prices. List prices may be

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8. Licensing provides a generic example; the taxi industry in many large cities provides specific instances.

identical among rivals (given an undifferentiated product) for several reasons: price leadership is one; conspiracy, another. If market prices (the prices at which transactions actually occur) deviate (downward) from list prices for most transactions, then any agreement, tacit or explicit, is not working or is working only imperfectly. Competition in price has broken out. (List price may soon fall to a more realistic level, to more closely reflect transactions prices.) However, if market prices generally or always are "at list", then the understanding or the agreement may be working well; no firm is willing to deviate from the list price in the search for more customers and thus violate that understanding or agreement.

Agreements, Understandings, and Common Pricing Procedures.

Firms in an oligopolistic industry may adopt a pricing procedure which reduces the possibility that competitive rivalry in price will break out. Collusion - communication and agreement on price or price structure - necessarily dampens (or attempts to dampen) rivalrous behaviour. The economic danger for the participants remains, that an individual firm may spitefully and secretly cheat on the agreement by lowering its price below the agreed price in the search for extra sales and profits. Such a price cutter hopes, even expects, that its rivals will adhere to the conspiratorial agreement. But if one firm is tempted to cheat, why not others? The breakdown of conspiratorial agreements attests to their oft-noted delicacy. In short, collusion attempts to solve one problem - what price the conspirators present to prospective customers - but may not solve a second - how to police the agreement, how to detect and discipline price cutters, how to enforce honour among conspirators. Price rivalry may be only incompletely suppressed by an agreement on price.

If price conspiracies offend the mores of society, and collusion is made illegal, then the oligopolists may search for a substitute price setting mechanism, one which also dampens price rivalry (and perhaps allows

the identification of cheaters), but without using direct communication.[9] When oligopolists employ collusive price leadership, the specific form of the pricing scheme depends upon the particular characteristics of the market.[10] As examples of such adaptation, consider two such instances in the United States: the lumber industry in the early 1920s and the electrical equipment industry in the early 1960s.

(i) In the period from the 1890's to 1925 the manufacturers of hardwood (primarily maple) flooring for construction developed such a scheme.[11] The producers were located primarily in three states. Michigan, Minnesota, and Wisconsin in the middle of the United States; they shipped to buyers throughout the country. Price was on a delivered

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9. Firms may adopt particular practices (short of collusive communication) which increase the likelihood of approaching and maintaining coordinated monopoly-like price strategies in an oligopolistic market. For a survey of such "facilitating practices": Salop in Stiglitz and Mathewson (1986). For the analysis of a particular antitrust case in which the theory of facilitating practices played a central role see Hay in Kwoka and White (1989) reviewing *E I duPont de Nemours & Co. v. FTC*, 729 F. 2d 128 (1984). The Federal Trade Commission embraced both the theory and its application, but on appeal the Court of Appeals reversed the Commission's application of the theory without rejecting the "basic approach."

10. For many years, at least until 1971, the manufacturers of gypsum wallboard ("gib board") in the United States matched identically the delivered list prices of the largest firm, United States Gypsum Co., now U.S.G., with price changes effective on the same date. Nevertheless, considerable "off (below) list" pricing existed, described in trial testimony by the defendants' expert economist, Richard Cyert, as "rampant competition". *U.S. v. U.S. Gypsum Co.*, 438 U.S. 422 (1978).

11. *Maple Flooring Manufacturers Association v. U.S.*, 268 U.S. 563 (1925). For an economic appraisal of this opinion, see Phillips (1962).

basis. The sellers using the scheme, 22 in number, supplied 70% of the product in the United States. The sellers faced the problem of how to reduce competitive rivalry, given differences in mills' costs of production, and given the diverse locations both of the producing mills and of the buyers. Each of the 22 sellers periodically and frequently submitted its average costs of production for various grades and types of flooring to their trade association, which in turn calculated the average of those average costs, reporting the calculation back to each seller. The Association also distributed to the 22 members a freight rate book, giving the rail rates for flooring from Cadillac, Michigan (a location central to the producing region), to between 5,000 and 6,000 destinations throughout the United States. Thus a seller could readily calculate a delivered price (the average average cost plus transportation) to almost any buyer in the country, knowing that other sellers would engage in the same calculation. This process considerably reduced the uncertainties of determining rivals' prices presented by different and unknown production costs and freight charges. If the suppliers followed this procedure, each buyer would be faced with similar if not identical offer prices. Clearly the intent of the scheme was to reduce price rivalry.

(ii) In 1963 General Electric and Westinghouse Electric remained the only two United States producers of turbine-generators used in the generation of electricity. Each customer, an electric public utility company, required that its own technical specifications for each generating installation be met by the equipment. Each sale was thus unique. On May 20, 1963 G.E. issued a price book for turbine-generators. This price book allowed its sales engineers to calculate G.E.'s bid price for any installation based on the buyer's technical specifications.[12] Changes in an offer price (if, say, costs

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12. *U.S. v. General Electric Corp. and Westinghouse Electric Corp.*, Federal Register Vol. 42, No 61 (March 30, 1977), 17004-9. This reports both the consent decree by which G.E. and Westinghouse consented to abandon this pricing procedure and the government's economic analysis supporting its conclusion that the procedure represented a tacit agreement on price in violation of S1 of the Sherman Act.

changed) could quickly, easily, and clearly be effected by changing a single number (the "multiplier") which was applied to the calculations based on the technical specifications. All that the G.E. sales personnel needed to calculate G.E.'s bid on any proposed contract was the price book and the multiplier. Westinghouse quickly acquired a copy of G.E.'s price book, which Westinghouse then adopted as its own, along with G.E.'s then existing multiplier. Thus both suppliers could easily face prospective customers with a common bid price.

General Electric, to display its non-rivalrous good faith, opened its order book for Westinghouse's inspection. In addition, both firms adopted a most favoured buyer clause (or "price protection" clause), extending for the six months following each new contract, to make any price cutting prohibitively expensive, by guaranteeing that buyers would receive a retroactive lower price if price cutting inadvertently broke out within six months of signing the contract.

In each of these examples, the oligopolists adopted a procedure which reduced the possibility of price rivalry or price cutting, either wilfully or carelessly. Buyers were faced with less (or no) dispersion in offer prices. The sellers took up the procedure independently, that is, they engaged in no direct communication, hence conspiracy was absent. Nevertheless, they reached an agreement or understanding, one which chilled the vigour of price competition. There remained, of course, the second problem present in conspiracies and understandings on price: how to identify price cutting and price cutters and how to police the agreement, if one or more of the suppliers breaks away from the agreement by offering a lower price. In the hardwood flooring example, no method of identifying price cutting was described by the Supreme Court; indeed the Court failed to find a conspiracy or agreement, despite the obvious implications of the Trade Association's activities. On the other hand, two elements in the G.E.-Westinghouse example strongly suggest that the tacit agreement was monitored for price cutting. G.E. opened its order book for Westinghouse's and customers' inspection, to preclude an inference of price cutting even before the scheme was in place. And both firms adopted a most favoured buyer clause (or "price protection clause") in the contracts, extending for the previous six months, to make

any price cutting prohibitively expensive by guaranteeing that buyers in that period would receive a retroactive lower price if current price was reduced.[13]

6.3 Collusive Agreements and Competition Policy

United States Policy Toward Price Fixing

In the US price fixing among competitors - horizontal, "naked" agreements on price (or division of markets or customers) involving direct communication - has been *per se* illegal under the Sherman Act of 1890.[14] The courts have often noted the necessary intent (and frequent effect) of a horizontal agreement: higher price, reduced output, and diminished quality of the product.[15] The aim and result of every price-fixing agreement, if effective, is the elimination of one form of

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13. Moreover, some purchasers utilised sealed bidding procedures when they awarded contracts. The public opening and reading of all bids instantly reveals any price cutting activity. For the role of secrecy in generating competitive rivalry, particularly in public procurement, see Miller (1975).

14. 15 USC sec 1. "Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States or with foreign nations, is hereby declared to be illegal..."

15. The major cases under the Sherman Act, Section 1 are: *U.S. v. Addyston Pipe and Steel Co.*, 85 F. 271 (1898), upheld by the Supreme Court, 175 U.S. 211 (1899); *U.S. v. Trans-Missouri Freight Ass'n*, 166 U.S. 290 (1897); *U.S. v. Trenton Potteries Co.*, 273 U.S. 392 (1927); *Chicago Board of Trade v. U.S.*, 246 U.S. 231 (1918); *Appalachian Coals, Inc., v. U.S.*, 288 U.S. 344 (1933); U.S. v. *Socony-Vacuum Oil Co., 310 U.S.150 (1940); U.S. v. Container Corp. of America*, 393 U.S. 333 (1969); and *U.S. v. United States Gypsum Co.*, 438 U.S. 422 (1978).

competition",[16] according to the Supreme Court in 1927. This *per se* proscription of price fixing remained inviolate until 1979. Under some, likely very narrow and unusual circumstances, a price fixing agreement might now be subject to the less stringent "rule of reason".[17]

Tacit Collusion

A difficult task, in economics and the law, is distinguishing between price fixing (as an agreement founded in direct communication among market rivals) and a tacit agreement (founded on oligopolistic interdependency in the market but without direct communication). It is the former, the "naked" agreement, rather than the latter, the oligopolistic "shared monopoly" that might cause "conscious parallelism" in prices, that courts have condemned as *per se* illegal under S1. In only a few cases in US antitrust has the prosecution of a tacit agreement been successfully before the Supreme Court.[18] The best known is the Tobacco Case of 1946. Three US tobacco firms with 68 - 90% of the cigarette market in the US were found to have made a price

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16. 273 U.S. at 397. The "rule of reason", first enunciated in 1911 in Standard Oil Co. of New Jersey v. U.S., 221 U.S. 1, and U.S. v. American Tobacco Co., 221 U.S. 106, does not allow a defence based on the reasonableness of prices or the ineffectiveness of a horizontal price fix.

17. Until 1979 horizontal price fixing in all forms was *per se* unreasonable hence *per se* illegal. Every contract restrains; that is the nature of a contract. Those contracts that restrain trade (i.e. that restrict supply and thus raise the market price) are unreasonable hence illegal.

18. For an analysis of a similar issue in Australian policy, see Miller and Round (1982).

fixing agreement.[19] There was no evidence that the firms had communicated directly with each other to reach an agreement. Instead the evidence involved a common course of conduct, price leadership, high (but declining) market shares, identical list prices, and behaviour which ensured substantially identical costs of the major ingredient to cigarettes, tobacco leaf.[20]

Per Se or Rule of Reason?

Two recent cases appear to have recognised a rule of reason approach rather than a *per se* approach to price fixing under some conditions. An agreement among universities[21] to restrict their competition in entertainment - televised football games - was struck down as an agreement on price which violated S1, although it was not a *per se* violation. The agreement was potentially pro competitive; "The NCAA [National Collegiate Athletic Association] plays a vital role in enabling college football to preserve its character, and as a result enables a

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19. *American Tobacco Co., v. US*, 320 US 781 (1946). Economic analyses of this case and of cigarette pricing in the conspiratorial period appear in Markham (1951), Nichols (1951) and Tennant (1950).

20. In the Cement Institute case (*F.T.C. v. Cement Institute*, 333 U.S. 683 (1948)) the Supreme Court inferred a collusive price fixing agreement by the collective use of a multiple basing point system. Each buyer of cement was offered the identical, delivered price from all sellers. The use of this system was an unfair method of competition which violated S5 of the F.T.C. Act. (The Federal Trade Commission cannot bring cases under the Sherman Act.)

21. *National Collegiate Athletic Association v. Board of Regents of University of Oklahoma*, 468 U.S. 85 (1984).

product to be marketed which might otherwise be unavailable."[22] An agreement among artists, composers, and performers (of music)[23] to set and collect royalties (prices) for use of copyrighted material was found not to be a *per se* violation of S1. An important element distinguishes these two cases from the *per se* rule on "naked restraints"[24] : the Court recognised that in both cases the product or service might not be supplied at all (or only in greatly reduced quantity) if the agreement were not in place. Thus the evils of monopoly - higher price, reduced output, deterioration in quality - remains the intellectual, economic foundation of the law on price fixing.

New Zealand Policy Toward Price Fixing.

Under the Commerce Act 1986 Price fixing in New Zealand is *per se* illegal, or so it has been described by commentators knowledgeable of the wording of S30: "... [A] provision of a contract, arrangement, or understanding shall be deemed ... to have the purpose, or ... likely to have the effect, of substantially lessening competition in a market if the provision has the purpose, or ... likely to have the effect of fixing, controlling, or maintaining ... of the price for goods or services..." "Naked" agreements - communication and agreement on price - are certainly covered; whether "contract, arrangement, or understanding" in New Zealand law is broader than "contracts, combination ..., or conspiracy" in US Law, so that tacit cartels, agreements without direct communication, are covered, will remain until a test case is brought before the Commission and the Courts.

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22. id at 102. "[In this industry] horizontal restraints on competition are essential if the product is to be available at all." id. 101.

23. *Broadcast Music, Inc. v. CBS,* 441 U.S. 1 (1979).

24. "[Price fixing is a] naked restraint of trade with no purpose except stifling of competition." *White Motor Co. v. U.S.* 372 U.S. 253 at 263.

Two cases recognised as involving price fixing have come before the Commission. In the *Vegetable Growers* Case[25] the Commerce Commission declined to grant authorisation for a collective pricing arrangement (CPA)[26] by which the applicants, Associations of Fruit Growers, sought approval for a "scale of charges (prices) on containers used to convey product to the auction markets throughout New Zealand" (para 5). The relevant market "at merchant level is that for produce packed in containers," (para 13), i.e. containers were not segregated from the fruit and vegetables they contained. Competition was substantially lessened; "growers collectively dictate a significant element of the price for the major portion of fruit and vegetables sold through the central marketing system" (para 24). The price of containers was collectively fixed (para 31); "prices were higher than they otherwise would be" (para 32). Public benefits were not established although the Commission considered the claims of such benefits.

In the *Kiwifruit* case[27] authorisation was granted (with conditions) for an arrangement, although competition was significantly lessened (para C/127). In balancing the effects, the Commission noted that the collective pricing agreement kept a ceiling on prices (rather than raising prices) and facilitated the orderly fruit flow to overseas markets. However the cartel is a "purchasing cartel" (para 6.2) which could be expected to exercise monopsonistic pressure downward on price. Also, the consuming public is foreign, since 95% of the kiwifruit is exported; "public benefit" from competition in New Zealand would flow to foreign consumers; domestic "public benefit" pertains to the growers.

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25. *Decision 206*, 29 July 1987

26. "Collective pricing arrangement" sounds like a euphemism for collusive price fixing. As New Zealand cases evolve, some CPAs will undoubtedly be deemed inoffensive, at least on a net benefit basis.

27. *Decision 221*, 15 September 1988

These two cases do suggest one important conclusion : pricing fixing in New Zealand is not *per se* illegal, since in *both* cases the Commerce Commission considered relevant the various dimensions of public benefit, as S61(6) requires in granting authorisation under S27 forbidding "contracts, agreements, or understandings" which substantially lessen competition. By current interpretation S30 considerations seem likely to be dominated by S27 considerations, and may have been rendered irrelevant by the Commission's current interpretations. The danger, of course, is that this legal loophole may be so large that the more egregious price fixing behaviour can be authorised if sufficient public benefit is discovered, even benefit to the producing rather than the consuming public.

6.4 Pricing Under Deregulation

What evidence exists that CPA or pricefixing (or tacit agreements or understandings) exist in New Zealand? Some evidence on pricing since the Commerce Act 1986 took effect and since the industries studied were deregulated is available in several studies undertaken at the NZIER (Miller *et al*, 1987; Miller, 1989). All six industries - brewing, cement, petrol, flour, real estate services, stock brokerage services - had been deregulated quite close to the time of the studies, at the most about 18 months before, at the least only a few weeks. All firms were thus still adjusting their pricing procedures to the newly imposed freedom to set their prices without governmental intervention. Moreover, the industry representations were aware of S30 of the Commerce Act and thus would not reveal any instances of communication with rivals or price; no conspiracy - communication leading to agreement - was discovered.

Two of the industries approximate the structural conditions of many suppliers, unconcentrated supply, and free entry. Brokerage fees within months of deregulation[28] had gone from a fixed scale of prices to

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28. (1 May 1986, the effective date of the Commerce Act 1986.)

negotiated rates. Higher minimum rates and lower rates on large transactions have reduced the subsidy of small transactions (and clients) by large transactions (by institutions). Thus prices more nearly reflect costs than under the regulated rates; efficiency is enhanced. However bundling of advice with transactions is still practiced. One discount broker has entered and survived: in November 1986 Access Brokerage Ltd entered, and it offers no frills (no advice), charging 1.5% of the transactions amount for the first $10,000, and 1% over $10,000 with a $20 minimum, lower than brokers who offer advice with execution of orders.

In real estate services, the period 1 December 1985 (deregulation) to May 1986 saw no reduction in rates; indeed most brokers raised their rates. Negotiation on rates was considerably more prevalent in commercial and industrial properties than in residential properties. Apparently rates have continued to rise since May 1986, when the residential rates "suggested" by the REINZ (charged by 74 of 119 surveyed agents) were $300 plus 3% of first $200,000 plus 1.5% over $200,000. Two large Wellington agents report (November 1988) for residential properties: Harcourts: $500 plus 3.75% of first $250,000 plus 2% over $250,000; and G Nathan: $300 plus 3.5% (no step). Flexibility apparently has emerged after deregulation; whether regulation was holding rates below an equilibrium, or whether some form of understanding has emerged since deregulation, is a question for further enquiry.

Beer and cement[29] both display characteristics of oligopoly : two firms; homogeneous products; little or no domestic competition (in beer, some small breweries exist, e.g. MacRoc in Nelson), some from abroad (Fosters in beer; none in cement). The similarity or identity in price could evolve from independent action in such an oligopolistic setting; communication would be superfluous.

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29. Price control in brewing was removed in May 1982; in cement, on 1 August 1986.

Flour milling is plagued by excess capacity. The market, freed from Wheat Board control on 1 February 1987, has performed the job of rationalisation that the Wheat Board delayed : three mills have already shut up, and other may quit within several years. Whether oligopoly produces a price leader of a barometric or collusive sort, and the extent of competition that remains, will depend on the mills that can survive and the working relations that can evolve. Conceivably the only mills that remain in the North Island, with no active or potential rivalry remaining from independent mills in the South Island, could evolve a tacit cartel. Three firms, one of them dominant, and the first and third largest with a history of close relations, all suggest the eventual emergence of a well-oiled oligopoly. Again tacit collusion may serve as an adequate substitute for an explicit price fix, particularly when competition from Australia is controlled by Trans Tasman ownership of milling capacity.

Petroleum wholesaling, a homogeneous four-firm oligopoly, contains a number of joint activities which involve cooperative activity and shared facilities: the acquisition of crude oil (feedstocks); the single, jointly owned domestic refinery ; the joint charter of water transport, and the sharing of storage and other port facilities. In addition nine of the twelve Refining Company directors are associated with the four wholesalers. Costs in all stages of production and distribution are virtually identical, so that the wholesale prices of petrol delivered to the ports are substantially identical for the four companies. Moreover, entry barriers are severe. Again, collusion is not necessary; conscious parallel action suffices, supplemented by the historical tradition of close working relationships developed during the period of governmental regulation. Price leadership, evolving since deregulation on 9 May 1988 will likely appear to be closer to the collusive sort than to the barometic sort.

6.5 Concluding Comments

Competitive rivalry in free markets generates social benefits; society's scarce resources are efficiently used to satisfy consumers' desires. In markets where consumers enjoy alternative supplies of similar goods, rivalry among suppliers is likely to exist. In other markets, monopoly

may exist and rivalry may correspondingly be deficient. In general suppliers utilize pricing procedures which reflect the extent and nature of that rivalry. Theoretical models of market pricing suggest the range of possible market consequences, with particular results dependent on the assumptions underlying any particular model. In an economy's markets, some
pricing practices denote independent and rivalrous activity, consistent with competitive behaviour. Other pricing practices, however, display attempts to blunt price rivalry, as in forms of tacitly collusive price leadership or, more arrant, explicitly collusive price fixing. After almost a century of federal experience, price fixing in the US remains *per se* illegal, but tacit collusion and common pricing schemes have only occasionally been found to violate S1 of the Sherman Act.

New Zealand's embrace of the competitive process is manifest by two recent policy changes: (1) the deregulation introduced widely in many New Zealand markets reinforced by freer international trade including CER, and (2) the Commerce Act 1986 which legislatively proclaims and legally ordains the policy of competition in New Zealand. But a nationwide policy of competitive markets demands a triad. To ensure that competitive markets become and remain an economic reality in New Zealand, the occasion of deregulation and the codification of competition must be complemented with vigorous and consistent prosecution of contracts, arrangements, and understandings which have the economic purpose or effect of "fixing, controlling or maintaining" prices. Here lies New Zealand's microeconomic opportunity and challenge. Dismantling of the nation's half century of market regulations and the adoption of competitive markets via the Commerce Act will prove vain without sagacious identification and vigorous prosecution of pricing mechanisms which blunt competitive rivalry and damage consumers through higher prices and restricted supply.

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CHAPTER SEVEN

THE ECONOMICS OF RESALE PRICE MAINTENANCE IN NEW ZEALAND[1]

Alan Bollard and Robert Bowie

7.1 The Economic Issues

Resale price maintenance is a form of vertical control where either manufacturer or dealer is responsible for a price floor being set so that goods cannot be sold at retail level below this. In this paper we analyse the nature of this vertical control; why it arises; its implications for economic efficiency; its overall welfare effects; and the implications this has for competition policy.

If manufacturers' and retailers' markets are both perfectly competitive then there is no incentive for vertical controls to come into being. Therefore, where resale price maintenance is found it indicates that some form of market "imperfection" such as monopoly power, is present. This does not imply that resale price maintenance is necessarily the source of the monopoly power, nor that banning resale price maintenance will eradicate monopoly power, as the discussion below makes clear.

A manufacturer with monopoly power selling into a competitive retail market where the manufacturer's product is used in fixed proportion with other intermediate inputs, has no obvious incentive for vertical controls. This is because one can maximise profit by simply choosing an

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1. For more detail than is available in this paper, see Bollard A and Bowie R (1988). We acknowledge comments from J Feil and H Donaldson.

optimal wholesale price. Selling of retail goods generally (although not always) implies the manufacturer's product is automatically used in fixed proportion. The mere existence of monopoly power by the manufacturer, is therefore, not a sufficient condition to expect resale price maintenance or other similar forms of vertical control to exist.

In practice, resale price maintenance appears to exist for a wide range of reasons. It is useful to classify these into three different categories: where a retailer cartel exists; where a manufacturer's cartel exists; and where resale price maintenance appears to have arisen as a self-interested act by an individual manufacturer. As will be shown, the welfare and efficiency effects in these three cases are different.

Retailer Cartel Explanation

In a number of observed cases, resale price maintenance appears to have arisen as a result of pressure by a group of retailers on one manufacturer. In such cases it seems reasonable to assume that a major objective for doing so is as a device to coordinate price fixing by a cartel of retailers. There are several cases in recent American anti-trust where retailers through retailer associations have induced manufacturers to apply or maintain resale price maintenance where manufacturers were otherwise apparently unwilling to do so. Examples are the sale of liquor products in the US earlier this century and the sale of certain pharmaceuticals by American drug stores. In this way such retailers associations could hope to coordinate prices by forcing the upstream manufacturer to use resale price maintenance. In such a case consumers would expect to face higher prices, and manufacturers to lose sales and profits, while the cartel of retailers would gain profits.

The question is whether it is likely that this is a plausible explanation of resale price maintenance. Overstreet (1983) in a comprehensive survey of resale price maintenance in the US, found that historically it was in fact retail groups who lobbied most heavily for the application of resale price maintenance. On the other hand a more recent survey by the Federal Trade Commission noted in Marvel and McCafferty (1985) found much stronger support for resale price maintenance amongst

manufacturers than amongst dealers and concluded that dealer cartels were a minor source of resale price maintenance. Marvel and McCafferty (1984) further posed the question of how retailers engaged in price fixing in this way could expect to maintain their monopoly rents, given the ease of entry which is normally found in retailing (other than heavily licensed outlets).

In response to these questions Mathewson and Winter (1985) set up two sub-theories of retailer induced resale price maintenance with different welfare outcomes :

(i) The Static Retailer Theory of Resale Price Maintenance: Mathewson and Winter point out that the set of necessary and sufficient conditions for a group of retailers to achieve and maintain monopoly profits by forcing resale price maintenance on an upstream manufacturer are:
- barriers to entry into the retail sector
- monopsony power of the retailers' cartel in buying the manufacturer's product
- strong price competition among retailers in the absence of resale price maintenance, and
- the impossibility of lump sum transfers from the manufacturer to the retailer

They point out, however, that in practice the first two of these conditions are not likely to hold, due to the typically large number of retailers, their geographic dispersion, low entry barriers to retailing and the broadly atomistic character of retailing markets. They agree with Easterbrook who argues that the static retailer theory of resale price maintenance only holds true in the relatively few cases where there are a few dealers, few manufacturers, homogenous products and easy policing of cartel cheaters.

(ii) Sunk Cost Retailer Theory of Resale Price Maintenance: In an attempt to find another economic rationale for the observable cases of dealer induced resale price maintenance Mathewson and Winter (1985) point out that the static theory ignores the existence of sunk costs.

Where sunk costs do exist, a trade association may still be rational in forming for the protection of quasi rents - even in the absence of long term rents. For example, in setting up shop, a new entrant incurs sunk costs in terms of knowledge of the market, store-specific physical capital, reputation for price and quality, the holding of an occupational licence, planning consent and other specific assets. In a competitive equilibrium, those that incur such sunk costs on entry must expect to earn quasi rents to provide them with a normal rate of return on their assets. This theory does not require the presence of entry barriers (beyond the existence of sunk costs). The necessary and sufficient conditions for it to take place are that retailers are able to coordinate the cartel with monopsony power over the manufacturer and can prevent cheating by cartel members.

The welfare implications of such an outcome are that there is a transfer from consumers and manufacturers to retailers. Consequently it is possible that welfare may be lowered by resale price maintenance under such circumstances. This could be signalled by the unwilling compliance of a manufacturer to impose resale price maintenance.

Manufacturer Cartel Explanation.

A different explanation for the existence of resale price maintenance is that manufacturers find it is in their interests to join together in a cartel and impose resale price maintenance on their dealers. As mentioned above, studies in the US have found that support from resale price maintenance tends to be higher amongst manufacturers than retailers. One explanation for this (though not the only one) would be that resale price maintenance is being used as a device to coordinate manufacturers' pricing. There could be other ways to impose vertical price controls with the same effect. Where, however, wholesale price contracts are complex or hard to coordinate, resale price maintenance may be the easiest way to do this.

It should be noted, however, that the desire to fix retail prices is not a necessary or sufficient condition for a manufacturers' cartel to profit from resale price maintenance. It is only a necessary condition if fixing

the wholesale price does not then imply that they have fixed the retail price, that is if there are significant variations in the costs of other retail inputs. If other such variations do exist resale price maintenance could enhance cartel stability by eliminating retail price variations and communicating what retail prices should be.

It is also worth pointing out that the existence of a manufacturers' cartel together with resale price maintenance does not necessarily imply that resale price maintenance has been responsible for coordinating the cartel. This makes public policy implications more difficult to derive. Manufacturers' cartels have been quoted as explanations of resale price maintenance in the US. Examples are the case of General Electric and Westinghouse by Telser (1980) and in the baking industry McLauchlan (1979) as quoted in Matthewson and Winter (1985).

Telser makes the point that in markets with declining average costs, price competition can lead to unstable prices, and a stable equilibrium may, therefore, be possible only if traders cannot do certain transactions. This is the "orderly distribution" argument for resale price maintenance. Even if the use of resale price maintenance by cartels reduces welfare, the best way to address this is not necessarily to ban the resale price maintenance; the same effect might be had by addressing the existence of the cartel more directly.

Efficient Distribution Argument

While the use of resale price maintenance as a horizontal collusive device by either retailers or manufacturers in the two explanations above, generally (though not always) is damaging to welfare, the opposite argument broadly holds in the case where a manufacturer acting alone imposes resale price maintenance. In practice, it appears that most cases of resale price maintenance fall into this latter (vertical) category. For this reason we examine the efficiency effects and welfare indications in some detail.

Why should a manufacturer acting alone wish to impose resale price maintenance? A common argument by policymakers and the courts is

that such resale price maintenance allows the exploitation of monopoly prices: the retail price of a monopolistically produced product is kept artificially high in the interests of the producer. This, however, is not strictly correct. A monopolist, typically facing a downward sloping demand for output at the retail level, would, in order to stimulate demand, want the retail price set as low as possible once the wholesale price has been set. Thus to the extent that resale price maintenance imposes a floor on retail prices, its use presents something of a puzzle.

One explanation may be that the demand curve is more complex than typically assumed, incorporating non-price as well as price determinants and also heterogeneous products. Where product differentiation occurs, each supplier may exert some degree of monopoly power. Depending on other vertical agreements such as exclusive dealing arrangements and territorial restrictions, so might each dealer. Resale price maintenance might possibly be an outcome of monopoly manufacturer and monopoly dealer. As Scherer (1979) notes it could dampen interbrand competition.

More likely is the importance of non-price characteristics such as dealer service. Then, increasing the price may make it in the interests of the retailer to increase non-price determinants of demand such as stocking and availability of a product, information about it, post sale service, etc. Mathewson and Winter (1985) show this in simple mathematical form

$$\pi = Q\,(P.X)\,.\,(Pw - C)$$

where π = manufacturer's profit
X = non-price determinants of demand
Pw = wholesale price
C = average cost

$$\text{then } \frac{dQ}{dP} = \underset{(-)}{\frac{\delta Q}{\delta P}} + \underset{(+)}{\frac{\delta Q}{\delta X}} \cdot \underset{(+)}{\frac{dx}{dP}} > O$$

Thus, depending on which non-price variables are thought to be important in determining demand for different products, a number of efficiency explanations of resale price maintenance begin to emerge. In

particular the retail price may induce:

- more retail outlets in the market stocking the product and existing ones improving their stock levels and availability
- an increased sales effort or improve point of sale information
- an improvement in post-sales service
- other improved service offered by retailers

We examine these in turn as alternative explanations for the use of resale price maintenance.

(i) The Product Availability Argument: It is a common argument advanced by business that resale price maintenance is necessary to protect or promote a retail distribution system. While this argument is frequently not spelled out completely logically by manufacturers, there seem to be a series of possible reasons here. The first is that retail margins may be too low to give retailers sufficient incentive to carry products. If the demand for a good is clearly sensitive to the number and types of outlets carrying it and a manufacturer imposes resale price maintenance on his product, then this may have a negative direct impact on demand through a higher retail price but also a positive indirect impact from the fact that a larger number of outlets will stock it. If the second indirect effect outweighs the former, then resale price maintenance is profitable in the sense of increasing economic efficiency.

This raises the general question why it is not always in the retailers' direct interests to set a price at the level at which manufacturers and retailers will jointly maximise profits. In general explanations of the vertical restraints rely on the existence of externalities at the retailer level and consequently the possibility of retailer free-riding. In this case there are two externalities which offset one another: firstly, the vertical one whereby retailers underinvest and overprice, and secondly a horizontal one whereby retailers can underprice. Note that the classic free riding externality is therefore not absolutely necessary in this case.

(ii) The Point Of Sale Information Argument: This is another classic efficiency explanation for the existence of resale price

maintenance. In the case of many products there is a need for retailers to provide some information on the item at the shop level. This could be in the form of demonstrations, trained sales staff, appropriate shelf space, or advertising. Individual retailers will only have an incentive to do this if they feel they can capture sufficient gains from it. The likely free-rider argument is that customers will seek to obtain information on products at such a shop and then purchase the products at a discount store. By opposing resale price maintenance a manufacturer can prevent discount house sales.

In addition to this horizontal externality is the vertical externality whereby retailers when investing in information would lose some of the benefits to the manufacturer. For this reason a retailer also underinvests in information. The type of goods where this is most common is where hands-on experience is necessary such as audio equipment, where there are complex heterogeneous items such as personal computers, and where there are standard repeat purchases such as jeans. Note that in the Sylvania case the US Supreme Court justified the use of vertical territorial restrictions on this free-rider argument, however they prohibited vertical price restrictions for the same reason.

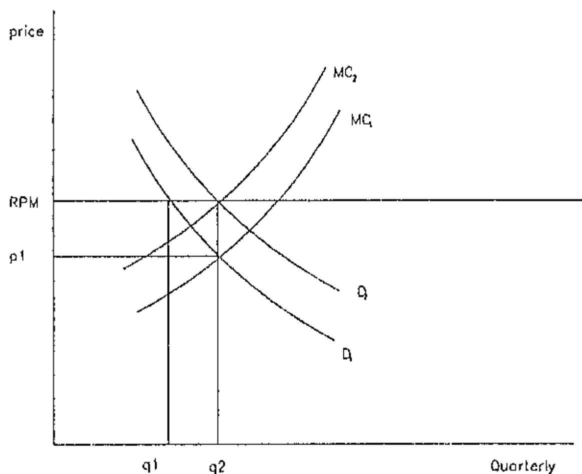
(iii) The Post Sales Servicing Argument: For many goods, retailers make a significant contribution to product quality through final product assembly, servicing the product, establishing a servicing system with their own guarantee, or other servicing. As in the previous cases the retailer is able to increase the quality of the product in this way, but in doing so will benefit the manufacturer, because not all the benefits can be captured by the retailer. In addition, if a consumer cannot distinguish between the retailer's and the manufacturer's distinct contributions to product quality, an improvement in service by one retailer adds to the sales of all retailers. Therefore, an individual retailer is likely to set quality standards too low.

(iv) Product Quality Argument: Marvel & McCafferty (1984) interpret one of the services offered by a retail store as being to signal product: that is, the store's decision to stock it is a form of quality

certification. Then resale price maintenance will be adopted when a manufacturer wishes to purchase quality (or style) certification from reputable dealers. This model leads to the use of resale price maintenance even when other vertical practices such as refusals to deal are available.

(v) Loss Leader Argument: Marvel & McCafferty show that, with certain assumptions, if the cost of providing services is fixed, the retail price will not increase. The common use of resale price maintenance in drugs and hardware cannot therefore be explained by quality and service explanations. A further explanation that has been offered is the loss leader argument: that the use of resale price maintenance may be due to manufacturers trying to avoid having their products treated as loss leaders.

Posner (1974) sums up the efficiency of services arguments by demonstrating how dealers will engage in more service competition under resale price maintenance than if they had been free to compete on price.



In the figure the price is pegged at a level higher than the dealers' marginal costs. They are unable to lower their price to p1 because of resale price maintenance at RPM. The gap between marginal costs and RPM generates profits which each dealer tries to earn by inducing customers to deal with them through improved service. This improved service is costly, raising the marginal cost curve as high as MC2, where demand is also higher. Profits are now competed away. The reason why each retailer does not provide these services without this price inducement is the free-rider problem.

Marvel & McCafferty (1985) interpret these uses of resale price maintenance as creating property rights to enable dealers to offer certain services without the dangers of free-riding.[2] They warn that to assess the welfare implications of these actions it is not possible (as many economists do) to simply consider whether output is increased or decreased by resale price maintenance. In attracting new customers, manufacturers may take decisions that impair the welfare of existing clientele. These welfare problems arise because manufacturers may choose to provide excessive levels of service to some customers while focusing on the marginal new customer.

There are two conditions for welfare loss. Firstly, the customer who is attracted by services, values those services more highly than customers who purchase them without; secondly, the customers who do not value the services as highly must still share the costs of the services. The magnitude of any such welfare loss depends on the price effects of resale price maintenance. Marvel & McCafferty show that if the cost of providing retail services is fixed, then the retail price will not increase under resale price maintenance. Therefore, any increase in retail margins caused by resale price maintenance implies an offsetting

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2. Williamson (1979) runs a similar argument couched in transactions cost terms, with dealers demanding a premium to invest because of bounded rationality, opportunism and other idiosyncrasies.

reduction in wholesale price. Thus under this condition, resale price maintenance must raise welfare. This is because the consumer pays no more, retailers are no worse off under resale price maintenance, and the manufacturer enters the resale price maintenance agreement voluntarily.

This result depends on two assumptions: first, that there is unitary elasticity of demand resulting from provision of dealer services, and second, that there are constant costs of service provision. If the first assumption is relaxed, welfare problems will arise only if the demand shift is very uneven. If the second assumption is relaxed, then there is no free-rider problem (as it costs free-riders to provide information). These assumptions are generally consistent therefore, with the desire of manufacturers to impose resale price maintenance. Consequently, they conclude more generally, that if manufacturers voluntarily choose to impose resale price maintenance to ensure that services are provided, welfare will almost certainly increase.

Welfare will also generally increase if services impose additional marginal costs only for those individuals who take account of them (as existing customers are not affected). One exception to this result is Marvel & McCafferty's acceptance that there could be a dynamic problem in distribution. Resale price maintenance could extend the life of existing distribution channels even when they are less efficient than new rivals by acting as a barrier to entry. This may have happened in the US in delaying the growth of discount houses which found it impossible to sell in bulk under resale price maintenance.

Mathewson and Winter conclude that where a single manufacturer finds resale price maintenance profitable - for whatever reason - the presumption should generally be that welfare is increased rather than vice versa.

A further possible rationale for the imposition of resale price maintenance by individual manufacturers is as part of a wider agreement. Resale price maintenance may be a price inducement to retailers in conjunction with a stocking or territorial arrangement. For

example, using resale price maintenance the manufacturer could offer to guarantee the retailer's margins, in return for the latter accepting an exclusive dealing arrangement or similar practice. Does such a combination of instruments affect the welfare implications? Used as a support to other ties, resale price maintenance could make it more difficult for new operators to break into the industry either as dealers or manufacturers, consequently requiring simultaneous entry at two levels. This would suggest welfare costs are involved. This possibility of resale price maintenance as part of a package of agreements has not been widely investigated in the literature.

A survey by Hollander (1966) did recognise that in economies where resale price maintenance has been legal, this packaging has been common: "The basic lesson apparently is that RPM can be imposed upon a dynamic economy only if it is accompanied by a set of more restrictive practices, such as barriers to entry, prohibitions on private branding, stop lists and cartelisation ...... The results clearly have been undesirable from the point of view of consumers and of the economy as a whole." (p100).

There has been notably little work in the literature on empirical tests of alternative theories of resale price maintenance, and in particular in measuring efficiency gains against monopoly welfare losses. Ornstein and Hanssens (1987) calculate the welfare effects of resale price maintenance in the retail sale of distilled spirits in the US. By estimating demand functions, liquor store licence values, and other costs they found that it was difficult to point to efficiency gains, whereas resale price maintenance did appear to lead to a reduction in consumption, and hence to a potential monopoly welfare loss in this particular industry.

7.2 The Practice of Resale Price Maintenance in New Zealand

There is some dispute about the arguments for and against, resale price maintenance. In New Zealand, however, resale price maintenance is absolutely prohibited under section 37 and 38 of the Commerce Act (1986). These resale price maintenance provisions follow closely the

Australian treatment of resale price maintenance in the Trade Practices Act (1974) and the spirit behind the provisions is similar to that which applied under the now repealed Commerce Act (1975), the predecessor to the 1986 Act. With such clear prohibition any attempts to evade resale price maintenance are unlikely to be successful.

The distributive trades in post-war New Zealand have been long dominated by import licencing, price control, strong trade associations, and a broad regulatory regime. There were relatively few importers and manufacturers in many industries, and collective pricing agreements were common. This background determined the nature of vertical arrangements between suppliers and distributors.

Under the 1958 Trade Practices Act, resale price maintenance was not specifically cited, though it could be covered by the examinable trade practices provisions as an unjustifiable refusal to supply. Such a practice was legal until the Commerce Commission made an order against them.

The 1975 Commerce Act changed this : now individual resale price maintenance agreements were illegal unless notified to the Commission and approved by them. At this time the practice appears to have been relatively common in New Zealand.

A 1976 Amendment to the Commerce Act allowed for "flexible" individual resale price maintenance agreements, whereby recommended prices only were involved without sanction if retailers priced below them. These flexible agreements had to be notified to the Examiner of Commercial Practices but did not need to seek approval. The Examiner could refer any considered contrary to the public interest to the Commission for inquiry. In practice few were referred. Most traders framed their arrangements to fit in with the "flexible" resale price maintenance conditions. However, there were many complaints relating to individual refusals to supply.

It is of some interest to note which companies notified the Examiner of resale price maintenance agreements, because it illustrates the extent to which such practices were to be found in the economy. The economic

outcome of these resale price maintenance practices differs depending on whether they are being used as instruments of collusion amongst distributors, instruments of collusion amongst suppliers, or purely vertical arrangements governing the distribution process.

There is not much evidence of the first two practices here (nor would we expect them to be evident). We cannot tell whether distributors have initiated or supported such applications. The suppliers are frequently reasonably large manufacturers, assemblers, importers and agents. Many are in oligopolistic industries (eg. television assembly, motor vehicle accessories, lawn mowers) where there might have been reason for supplier collusion, though there is no evidence resale price maintenance has been used as such. It appears however that one thing dominating suppliers' attitudes to resale price maintenance was whether their competitors were using it or not.

There is some reason to support the third interpretation, that the practice is principally a vertical arrangement to support an efficient distribution network. The evidence is that roughly one half of products cover consumer durables.[3] These would involve households in substantial, sometimes technologically complex, purchases, and carry with them the range of information, product availability, product quality, and servicing problems that resale price maintenance may address.

The interim approvals granted for these registered resale price maintenance agreements were revoked with the coming into force of the 1986 Commerce Act. By this time many of the agreements were no longer in practice. A survey of New Zealand distribution practice at the time of the signing of the 1986 Commerce Act (Ayto and Bollard, 1987)

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3. Stoves, motor vehicles, lawn mowers, vacuum cleaners, water heaters, heaters, tyres, caravans, electrical goods, audio equipment, televisions, other brownwear, sewing machines, whitewear. For further details see Bollard and Bowie (1988). The other half of the applications covered a wide range of domestic and industrial products.

found no use of resale price maintenance (which was at that stage illegal); but there were many other vertical arrangements and understandings about price and supply (see table). It was concluded that New Zealand manufacturers were in some cases using these techniques as substitutes for resale price maintenance where their aim was to reduce free-riding possibilities or to foster a quality image.

Respondents Reporting Vertical Agreements in Distribution (%)
(1986)

	Wholesalers	Retailers
Recommended price lists	65	75
Agreements to supply only certain outlets	16	40
Agreements to carry only certain products	10	25

Source: Ayto and Bollard (1987). Some wholesalers are also retailers and vice versa.

The general feeling within the industry seems to be that by 1986, with deregulation and the wider availability of imports without licence, the widespread use of resale price maintenance had ceased and there was not much demand for its reinstatement. Two "vocal" exceptions to this would be the use of resale price maintenance on books by publishers and on whiteware by manufacturers.

There has been little judicial activity on resale price maintenance since the signing of the 1986 Act. The only court case under the 1986 Act relating directly to resale price maintenance was *Direct Holdings v Feltex and Smith & Brown* (CP242/86). There the plaintiff, a discounting furniture retailer, charged that the first defendant increased its wholesale price for bedding in response to the second defendent's threat to withdraw its custom if the plaintiff continued to discount.[4] A related

case that came before the Commerce Commission was an agreement between the Minister of Health and the NZ Medical Association that increased benefit for child patient consultancies would be passed on to the patient. The Commission (Decision 220) concluded that the matter lay outside the scope of the Commerce Act.

Partly for the regulatory reasons described earlier, and partly because of our small markets, New Zealand has been slow to develop the American discounter-type of store which typically buys in very large quantities direct from manufacturers receiving significant quantity discounts, and then on-sells to the consumer at prices well below recommended retail prices, often with little service. In the US these discount stores are of some importance. They have led the right to maintain the illegality of resale price maintenance there.

A further complication relating to resale price maintenance in New Zealand has been the widespread use of administered prices and price control in the past. While controls over the selling price of products like milk, eggs, cement and gas did not formally constitute resale price maintenance, some of the effects were similar.

7.3 Resale Price Maintenance and Competition Policy

Economists who broadly agree about the rationale for resale price maintenance and its welfare effects, still differ as to the appropriate way to best achieve these welfare considerations through competition policy. This depends on their views on the way different rationales for the practice are signalled, how reliable these signals are, and how commissions and courts will interpret these signals.

Leffler (1985, p.381) takes a pessimistic view:

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4. A further case involving the right of a distributor to set a ceiling price is discussed by D Round in this volume.

> "... evaluation of the efficiency of practices such as franchise input tie-ins and resale price maintenance requires complex theoretical analysis to reach ambiguous conclusions. Given these results, I suggest that the efficiency analysis of these practices provides no guide to policy. The exercise produces no useful conclusions; indeed, the requisite theoretical complications and empirical detail are likely to be beyond the abilities of those who debate and decide in courtrooms. I suggest ... that a simple examination of the direct competitive effects in the product market concerned provides a workable, reasonably efficient antitrust guide to presumptive legality or illegality."

On this question of what the presumptions should be in the case of resale price maintenance, Leffler suggests as a rough working guide that any agreements among direct competitors should lead to a presumption of illegality, while producers of new products must have a presumption of legality because the arrangement could not directly harm retailers. If however there is injury to competitors, the dependents could still seek to show on an efficiency basis that any resulting decreases in competition are more than offset by increases elsewhere.

Mathewson and Winter (1985) claim a more positive role for economic analysis and the economist in proceedings. They would seek to test for the existence of a manufacturer cartel, a retailer cartel, or an efficient distribution rationale for resale price maintenance. In each case there are both behavioural and structural indicators, usually establishing necessary conditions but sometimes also structural ones. The test of the first possible rationale is that prices for all products in the relevant markets are maintained at the same level (ie. there is no "price-chiselling"), and the usual institutional conditions for a manufacturers cartel are satisfied: namely a few producers, homogeneous and stable products, and barriers to entry. Where a cartel is identified, it should be prohibited. They comment that such cases are easy to identify but (at least in the Canadian context) seldom arise.

The possibility of a retailer cartel is also unlikely in the absence of a strong industry association. There are usually large numbers of retailers of the type of products where resale price maintenance arise. Nevertheless some observable characteristics such as territorial exclusivity or sunk costs may encourage cartelisation. In any case this hypothesis offers one clear and testable outcome - that the manufacturer of the product should be worse off under the resale price maintenance agreement.

The final possibility is the use of resale price maintenance to improve a distribution network. This is characterised by the presence of a single manufacturer acting in his own self-interest. It may be possible to observe this directly. Where this behavioural test is not possible, Posner (1974, p.134) suggests a structural one that investigates whether the products under resale price maintenance also involve important service considerations:

> "The same test should enable an enforcement agency to distinguish between resale price maintenance schemes imposed by a single seller for his own ends and resale price maintenance schemes nominally imposed by a single seller but actually imposed by his dealers to eliminate competition among them. If the product is not one sold with services, the latter inference can be drawn."

The conclusion reached by Mathewson and Winter is that resale price maintenance should be legal unless conclusive evidence is presented that the price floor supports a producer cartel or protects a cartel of established retailers against entry by more efficient retailers. The burden of this proof should rest with the Crown. In particular the imposition of resale price maintenance by a single manufacturer in its own self interest should carry a presumption of legality. Commercial policy does not generally give regulators the right to regulate directly service, quality or advertising in vertically integrated manufacturers. They therefore should not attempt to regulate these same variables when they are established indirectly through resale price maintenance.

Simplified Outcomes of Resale Price Maintenance

Imposed by:	Rationale	Likely Efficiency Outcome	Likely Welfare Outcome	Means of Identification (a) Structural test	(b) Behavioural test
1. Cartel of manufacturers	collusion	indeterminate	negative	few producers homogenous stable goods barriers to entry	prices of all products in relevant markets are equal
2. Cartel of retailers	collusion	indeterminate	negative	strong industry organisation. Other conditions, eg territorial exclusivity or sunk costs	manufacturer worse off under RPM
3. Individual Manufacturers	efficient distribution	positive	positive	products involve service conditions	manufacturer acting alone in self-interest
	support another trade practice	positive	indeterminate	other practices eg EDA	manufacturer worse off under RPM but better off overall

Note the exceptions to these outcomes detailed earlier.

Within competitive limits, manufacturers should be free to chose the retailing environment that they consider to be the most efficient.

This presumption of the Act conflicts with the theoretical economic argument reviewed earlier which clearly shows that there are indeed countervailing benefits arising from resale price maintenance, and that under certain likely circumstances, these may outweigh the disadvantages.

To summarize, the economic view depends on whether the resale price maintenance has been erected for reasons of perpetuating collusion at the level of supplier or dealer, or purely for the purpose of reinforcing the system of distribution. In the former two (horizontal) cases the effect on welfare is likely to be negative and the practice should be avoided. In the third (purely vertical) case, which appears from observation the most likely, the effect on welfare is positive, and the practice should generally be allowed, unless its intention appears to be to support another vertical trade practice (in which case the net effect needs to be assessed).

In an early press statement on the Act the Commerce Commission stated (15.8.86):

> "An objective of the Commerce Act is to encourage the widest variety of resellers and of price/service policies thereby giving the consumer greater choice of price and service levels .... By not allowing any resale price maintenance to be authorised by the Commission on public benefit grounds, the Act presumes there to be no mitigating circumstances or countervailing benefits arising therefrom."

This is summarized in very simplified form in the table. The challenge for policy is to distinguish between the horizontal and vertical cases. Note also that these theoretical conclusions have been subject to little empirical testing, and where tests are available, they have not always supported the hypotheses advanced by the theory.

If resale price maintenance is made illegal, then the prevailing industry structure may still lead to alternative substitute vertical restraints being

formed. For example, manufacturers concerned with adequate promotion of their productsby retailers may specify a level of required promotion in a contract and monitor this. If these alternatives are forced on manufacturers by the illegality of resale price maintenance, then it may generally be assumed these means are more costly in a private sense and probably in a social sense as well. Hence, there is no overall benefit from this move.

The welfare costs of legalising resale price maintenance may be overstated : this could be the case where welfare concerns such as cartelisation are already allowed by other (legal) non-price vertical practices. In such cases allowing resale price maintenance may make little difference to operating practices.

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NATURAL MONOPOLIES AND THE COMMERCE ACT[1]

Andrew Duncan

8.1 Introduction

The aim behind the Commerce Act is to encourage economic efficiency by promoting competition. However where industry is characterised by natural monopoly, cost minimisation and efficient pricing are not likely to be achieved by the disciplinary forces of competition. In these circumstances how will the Commerce Act operate? How, for example, will the Act constrain the influence on competitive markets of firms which own or operate natural monopolies.

The first section of this paper briefly describes natural monopoly and the cost concepts associated with it. The second section discusses the application of section 36 of the Commerce Act to natural monopolies. The type of trade practices likely to arise in association with natural monopoly and the incentives a monopolist has to engage in those practices are then discussed. The application of overseas anti-trust law to this type of behaviour is then described and the issues which would need to be determined in cases under New Zealand law discussed. The discussion focuses on the use of non-price predatory behaviour.

The discussion that follows uses a number of terms with which the reader may not be familiar. The terms are interchangeable but do have some subtle differences. They may be subdivided into those commonly used by the legal and economic professions. Essential facility and bottleneck facility are United States terms given special meaning by

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1. This is a condensed version of Duncan (1989). The longer paper incorporates discussion of the remedies available to the courts where the Commerce Act is breached and the application of the Act's merger regime.

judges in a number of important court cases. Essential facilities and bottleneck facilities are the same thing, facilities which cannot be reasonably or practicably duplicated and to which access is essential to carry on business. Common carrier is a term used in both law and economics which refers to a regulated industry which is under an obligation to accept all custom subject to capacity being available. A natural monopoly is described below and is an industry where one firm is the lowest cost producer. A network industry is an industry characterised by a substantial network of wires, pipes or similar structures that connects all the users of the service to the supplier and/or each other.

8.2 Natural Monopoly

The term natural monopoly has traditionally been used to describe those industries in which only one firm operated due to characteristics endogenous to the industry rather than due to some artificial property right, such as a patent or licence. These endogenous characteristics were attributed to the nature of the industry's cost function. Subadditivity of the cost function is the characteristic with which to identify a natural monopoly (Baumol, 1977). A cost function is subadditive if no combination of smaller firms can produce the range of outputs at a lower cost than one firm. W W Sharkey (1982) in his book *The Theory of Natural Monopoly* provides a comprehensive discussion of natural monopoly. He describes subadditivity as being of a technical or organisational nature; these factors representing respectively plant and firm subadditivity.

Subadditivity is a simple mathematical concept. However it is difficult to identify because ideally it requires global knowledge of the cost function. Information about the cost of production at every level below the output at which the test is being conducted must be available. Determination of the subadditivity or otherwise of a cost function may be achieved by identifying those characteristics of the function which are sufficient for it to exist. Certain combinations of the measures of the economies accruing to the size of the operations and of joint production economies are useful tests.[2]

The cost characteristics which are easiest to describe within an industry are technical and organisational economies of scale and scope. Technical economies of scale and scope arise because of industry technology. The organisational advantages of a single firm arise when organisation of productive activities within a firm is more efficient than in a market (Sharkey, 1982, p80).

There are a number of industries which exhibit some of the cost characteristics described above. Those that are most commonly referred to as natural monopolies are electricity, telecommunications and natural gas. It is the transmission and distribution functions of these industries that are natural monopolies and not the other vertically related elements of the businesses.[3]

8.3 Restrictive Trade Practices

Firms which operate natural monopolies are most likely to come into conflict with the Commerce Act in terms of section 36 which proscribes a firm with a dominant position in a market from using its market power for anticompetitive purposes. Of course, a natural monopolist has no competitors. The market in which such a firm operates and has a natural monopoly will not suffer from anti-competitive actions. The concerns about anti-competitive behaviour arise from the potential for market power in one market to be used in another market where the monopolist may or may not be vertically integrated.

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2. See Baumol (1977), Baumol, Panzar and Willig (1982).

3. The factors that contribute to natural monopoly in the distribution functions of these industries are discussed in Duncan (1989) at p4.

There are several types of possibly anti-competitive behaviour which a natural monopolist might engage in. The principal one focused upon here is refusals to deal or denials of access. In the case of an essential facility this refers to the owner of the facility refusing to allow other firms with whom it competes in vertically related markets access to the facility or in other words refuses to deal with it. Other practices associated with market dominant firms are requirements contracts, exclusive dealing, tying contracts, predatory pricing and price squeezes.

Requirements contracts and exclusive dealing involve the monopoly requiring that downstream businesses only deal with them. These practises affect competition in the market in which the firm engaging in them operates. If the firm is a natural monopoly with substantial market power then such arrangements will have no effect upon competition as there is none to affect.

The other practices all have similar effects. Under a tying contract a firm with market power requires businesses to whom it sells its monopoly output to purchase another one of its products. Instead of extracting monopoly rent by charging a high price it is extracted through the forced sales of another product. Tying contracts may be interpreted as refusals to deal on reasonable grounds. Price squeezes occur when an input monopolist charges a firm with which it competes in a downstream market a high price for the input. The high input price limits the firm's ability to compete with the monopolist's downstream operation. This can also be considered within the context of refusals to deal on reasonable grounds or, as described herein, denying access. This might also be considered as predatory pricing by the monopolist's downstream operation if an internal transfer price in imputed from that charged to outsiders.

A party directly or indirectly denied access could charge that the natural monopolist had contravened section 36. Under section 36 a a firm with a dominant position is prohibited, from amongst other things, using its dominance for the purpose of restricting entry to the market in which it is dominant or to any other market. Would a firm wish to exploit its market power in this way?

The Firm's Incentives to Foreclose the Market

Ratner (1988) discusses the incentives the owner of a natural monopoly may have to deny access when the owner is integrated into an upstream or downstream market and when they are not. I will follow his line of argument as it is important for anti-trust analysis that the reasons why a course of action has been taken are understood. Recognising those environmental conditions which are more or less likely to encourage anti-competitive behaviour can make it easier to identify behaviour which merits further investigation and eliminate that which does not. Ratner's paper discusses this in the context of access to essential facilities.

Ratner (p348-9) assumes an unintegrated essential facility with spare capacity, and argues that a denial of access to a party unwilling to meet the costs of access to such a facility is efficient. A denial of access is justified as efficient resource allocation requires that parties seeking to use a resource must meet the cost of doing so. Ratner considers the obvious motive for access denial is to reduce output and raise prices. This is classic monopoly behaviour. However the purpose is not to limit or exclude competition and therefore does not on its own contravene section 36.[4] Such an intent may however contravene the provisions of the Act if that objective is reached via an intermediate step which does not affect competition. These were the circumstances of the *ARA v. Mutual Rent-a-Car* case where exclusionary contracts were used to remove some competition allowing higher prices to be charged.

The more interesting case arises when the facility is integrated into a vertically related market segment. Ratner (1988, p350) argues that the firm owning the facility has a greater incentive to exercise its market power to strengthen its position in the other market.

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4. See for example Travers (1986).

However Ratner shows that in these circumstances a profit maximising firm will have no incentive to inefficiently deny access as it can set a monopoly access price. A more efficient competitor in the vertically related market will not be excluded, as the firm can extract greater rent from the more efficient operator than from its own integrated operation. Alternatively if the monopolist's own firm is more efficient in the other market then it will deny others access as greater rents can be earned in this way. The monopoly profit can only be earned once. The business will not deny access in a manner that will discourage efficiency. Its actions will not be anticompetitive.

With a profit maximising incentive the problem with the monopoly is not whether it is integrated or not, but with its ability to reduce output and raise price (Bork, 1954). This argument rests on the premise that the integrated firm denying access to a competitor is aware of the profit maximising strategy and is a profit maximizer. Many firms may not be aware that they maximize their profits by adopting the strategies suggested above. Amongst other reasons, an inappropriate transfer pricing policy may result in the downstream competitive segment of the business appearing to be more profitable. The reaction of the firm's managers to competition may therefore be to deny access. This response may be exacerbated by a lack of profit maximising objectives. This is discussed below.

Ratner (1988, p353-354) considers two other scenarios where an integrated monopolist may deny access. The first occurs when a monopolist's ability to price discriminate is limited be downstream competitors in the downstream market or by arbitrage between its own customers. Where downstream competitors limit the ability to price discriminate in the downstream market they will be eliminated. The monopolist can then reap the maximum economic rent. Where the monopolist's own customers can trade amongst themselves the product or service the monopolist sells, the monopolist has an incentive to deny access to the lower value users of the product or service if the monopolist cannot stop arbitrage. In this way the monopolist can continue to reap the maximum rent from the higher value users. If the monopolist did not deny lower value users access these parties could sell

by arbitrage the product or service to the higher value users thus impeding the monopolist's ability to cut quantity and raise price.

The second scenario arises where the monopoly segment of the business is subject to some form of regulation which limits the monopolist's ability to earn a monopoly profit in that market. The monopolist may then seek to deny access to the vertically related market to competitors so that it may reap monopoly profits in the unregulated market. In an upstream market it would be able to buy inputs from itself and set monopoly level transfer prices. In a downstream market it would be able to sell output to users at monopoly prices. This scenario raises serious concern at the effectiveness of regulation.

The above discussion suggests that in the absence of regulation and without limitations on price discrimination the incentives of an integrated or unintegrated monopolist are the same. If firms are profit maximisers the problems in vertically related markets are caused by monopoly in the non-competitive market segment. Integration does not add to the problem. This problem is not different from other monopoly problems. The problem is related to the non-competitive monopoly market and not the competitive related markets.

The assumption to relax in this analysis of the firm's incentives is the profit maximising assumption. The objectives of the owners and managers of the firm will not necessarily coincide and therefore the firm may not pursue purely profit maximizing strategies. The difficulties faced by owners in governing the actions of agents may be greater in markets with little or no competition (Vickers and Yarrow, 1988, p68). In these circumstances the diversion of the firm from a profit maximising path may lead to a strategy of expansion into other markets if this is an objective of management. Such an unprofitable or suboptimal strategy may be pursued by means of anti-competitive practices.

The market characteristics identified above can be used to differentiate between cases where behaviour is more or less likely to be anti-competitive. For example in the absence of one or other of the

circumstances described above it is unlikely that a rational firm's actions would be anti-competitive given a lack of incentives for such action. To further test the hypothesis that actions are or are not anticompetitive, the nature of the firm's actions needs to be more closely observed.

The law provides the framework within which these issues are discussed. It is valuable to note how similar issues have been dealt with in New Zealand and overseas.

Essential Facilities Doctrine

A litigant who brought an action claiming that it had been denied access to a natural monopoly, or essential facility would, if it proved its case, require the Court to order the monopolist to make access available as this would be the only effective remedy. The question that arises is whether indeed the courts would apply such a remedy. Anti-trust laws in general limit the freedom of firms to exercise their economic power. The property rights of the firm are thus constrained. The remedy suggested above appears to impose an even greater limitation on the property rights of the firm. Have the Courts been willing to impose such orders in New Zealand and overseas?

In New Zealand the first case to deal with an issue under section 36 was *ARA v. Mutual Rental Cars*. The ARA sought a declaratory judgement from the court on the status of contracts between itself and Hertz and Avis. These contracts limited the number of rental car concessions at Auckland Airport to two. Barker J found that ARA was dominant in the defined market. Barker J also found that ARA's purpose in framing the contracts was to limit competition in the market and in reaching this decision drew upon a number of United States cases on "bottle neck facilities". Barker J described a bottleneck facility as -

> a facility which is incapable of duplication and of circumvention and to which others must have access if they are to compete in a given market".

The United States cases he referred to have developed into the essential facilities doctrine. This is described in the *Hecht v. Pro Football League* case as -

> "Where facilities cannot practicably be duplicated by would-be competitors those in possession of them must allow them to be shared on reasonable terms. It is illegal restraint of trade to foreclose the scarce facility. To be essential, a facility need not be indispensable; it is sufficient if duplication of the facility would be economically infeasible and if denial of its use inflicts a severe handicap on potential market entrants. Necessarily this principle must be carefully delineated; the antitrust laws do not require that an essential facility be shared if such sharing would be impractical or would inhibit the defendant's ability to serve its customers adequately."

In the USA cases have been taken under the doctrine in the telecommunications, electric power and railroad industries amongst others. In Australia the applicability of the essential facilities doctrine under section 46 of the Australian Trade Practices Act 1974 was questioned by the courts in the obiter statements of the Federal court in *Queensland Wire Industries v. BHP*. BHP who were dominant in the supply and manufacture of Y-Bar refused to supply it to QWI for use in the manufacture of star picket fencing. The Federal court found that whilst BHP was dominant and had acted with the purpose of limiting competition they had done no more than "decline to see product which it has not previously sold and which it desires to keep for further processing" and in doing so it had not taken advantage of its dominant position in the market".[5] The Court then discussed the essential facilities doctrine while noting that it did not fit the facts of the case before them

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5. Quoted in Department of Trade and Industry (1988).

and concluded that it is "not readily accommodated to the terms of sec 46".

The Court's discussion of the essential facilities doctrine has been criticised by Pengilley (1988) and their decision on the Y-Bar case overturned by the High Court[6] who deal with the case solely in terms of section 46. The High Court on appeal found that BHP had a substantial degree of market power and had used it for a purpose proscribed in section 46. The High Court returned the case to the Federal Court for a ruling on costs and on the basis on which BHP must supply QWI with wire. This case represents a significant precedent in Australia and one which is likely to be influential in New Zealand.[7]

The Application of Section 36

A number of issues need to be resolved in determining whether or not s.36 of the Commerce Act has been contravened. I will follow the tests established by section 36 in order to discuss the analysis of these issues. It is essential that economists when considering the practical application of anti-trust laws to particular cases follow the tests established by the relevant laws.[8]

The first issue is the definition of the market. Second, once a relevant market definition is determined the market power of a firm must be assessed to determine whether a dominant position exists. There are three factors to be taken account of in the assessment.

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6. *QWI v. BHP Coy Ltd and Anor*

7. As such it deserves more in depth analysis than can be provided here. It is not focused upon because the facts do not fit the natural monopoly essential facility description as noted by the Federal Court.

8. The application of the test in s.36 is discussed in more detail in Duncan, 1989 at p16.

The first is the share of the market, the technical knowledge, the access to materials or capital of the firm. Second is the extent to which the firm is constrained by the conduct of competitors or potential competitors in that market. Third is the extent to which that person is constrained by the conduct of suppliers or acquirers of goods or services in that market.

Once a firm's dominance has been established, the next test set in section 36 of the Act is whether that dominance has been used for one of the prohibited purposes. The principal issue is a denial of access to the essential facility. This may be a direct denial of access, however it is more likely to appear as an indirect denial of access. The owner or controller may be accused of setting unreasonable prices or requiring overly stringent technical standards to be met.

The initial point to be noted is that US courts have found that access need only be made available where spare capacity exists. In the Hecht case the court stated that there was no need to share the facility "... if such sharing would be impractical or inhibit the defendants ability to serve its customers adequately." A requirement to share at full capacity that disadvantaged the monopolist's own downstream firm would be an unjust infringement of that firm's property rights, even though it might allow the most efficient firms to operate in the competitive segment of the market.

Pricing

The two most important issues which arise in the resolution of any case taken to deal with a denial of access are technical and pricing issues. Are the prices and technical standards set by the monopolist reasonable or unreasonable.[9] The monopolist may set prices so high as to exclude any external party from use of the facility they operate. The price could also be set very low by a regulator or the courts in this type of case to

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9. Some of the difficulties in assessing monopolists' prices are discussed in Duncan, 1989 at p20.

encourage entry. There are a number of difficulties in establishing prices for the services provided by any monopoly.

Real problems exist in making judgements about pricing policies. The parties will dispute the determination of classes of costs and of cost allocation. The issue of price discrimination will arise and it will be necessary to determine whether or not the discrimination used to allocate fixed costs is efficient or not.

Technical Issues

Technical reasons may also be cited as reason for denying access or be used as methods of foreclosing access. The principal issues in relation to setting technical standards for access to essential facilities have been discussed in New Zealand in relation to telecommunications (Touche Ross, 1988). The issues involve the disclosure of new and existing standards for interconnection to the Telecom network and how the standards for external connection relate to those set for connection to the network of Telecoms own operators in similar lines of business to the parties seeking interconnection. The issues are also relevant to gas and electricity networks and may have some relevance to other essential facilities.

The concern with the first issue is that the owner of the facility will delay the release of required technical standards. The firm could release only part of the necessary information or require a party seeking connection to disclose detailed business plants to it before providing them with information. The monopolist could also demand that each potential entrant negotiate separate agreements and retain the confidentiality of these.

However the delays in releasing information could be the result of the high costs of generating this information. The manner in which the monopolist undertakes negotiations also needs to be assessed. The monopolist may require knowledge of the entrants plans in order to determine the parts of the network to which connection is sought. The

firm seeking access would be at a substantial disadvantage with its plans open to the scrutiny of its principal competitors.

A monopolist forcing each potential entrant to negotiate separately for access whilst maintaining confidentiality effects two purposes. First the entrants' costs are raised. Next the rents the monopolist can extract are raised because the limitation on the transfer of information between potential entrants reduces their relative bargaining ability in negotiating with the monopolist.

The second problem is that the monopolist has a monopoly on information about the network and in particular about proposed changes to the network. This monopoly could be used to raise a competing downstream firms' costs. The operator of the facility could continually make changes to it giving little or no warning to the downstream competitors. This will inhibit the competing firms ability to serve their customers and absorb much management time in trying to resolve the problems created by sudden technical change.

It is suggested that constant changes to the network or the sudden announcement of changes may disadvantage a downstream competitor. The first strategy could only be assessed over a period of time. What constitutes the sudden announcement of changes is very relative. The monopolist's integrated downstream business units have lower transaction costs in acquiring information about and contributing to these developments. If indeed these developments represent joint programmes then the rationale for retaining confidentiality from others users for some period of time may be sensible.

The final issue relates to the relationship between the standards required of vertically related firms and those required of outside firms. The operator of the facility could set more stringent standards for external firms. However it may be both efficient and in the monopolist's best interests to establish different standards for internal and external connection to the essential facility. Connection of a vertically related downstream firm is less risky. Both operators are part of the same business group and hence have similar objectives. An outside firm

cannot be so directed by corporate management and the lack of similar incentives could result in careless use of the facilities with associated costs to the monopolist.

8.4 Conclusion

For those responsible for enforcing competition law, the principal concern should be with the exercise of a natural monopolies market power in other markets. A monopolist would exercise its power in this way to capture further profits through the avoidance of regulation; or to eliminate arbitrage which undermines price discrimination or possibly as part of the pursuit of some non-profit managerial objective. Despite the concerns about the exercise of market power in these ways the essential issue remains the ability to reduce output and raise price.

Vertical integration does not add to the incentive problem, however it makes it harder to deal with the abuse of monopoly power. Analysts can more easily assess a firm's behaviour when only one activity is observed. The problems with integration cannot be completely addressed ex-post by competition law. Regulation of industry structure may be a better choice than conduct regulation via the Commerce Act (Kay and Vickers, 1988, p313). This suggests that where the government may influence industry structure they should place emphasis on analysis of the issue of whether to integrate natural monopoly and competitive business elements within one firm.

While the Commerce Act cannot overcome all the problems of natural monopoly alone it can be applied to limit the extension of power from one market to another by the prohibitions on the abuse of market dominance in section 36.

Natural monopoly easily meets the test of market dominance in the Commerce Act. The evaluation of the firm's behaviour however is more complex. The principal issues are the availability of capacity, the level of price and the nature of technical standards.

The analyst must be very cautious about drawing definite conclusions when investigating these issues. In many cases price may give ambiguous signals about intent. This is a problem particularly when a large proportion of total cost is fixed cost. In these circumstances there may be no first best pricing solution and it will not be easy to distinguish between equally suitable second best methods such as some forms of price discrimination.

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