

GEOGRAPHIC MARKET DEFINITION IN COMPETITION LAW

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CONTENTS

I NATURE AND FUNCTIONING OF GEOGRAPHIC MARKET DEFINITION	299
A <i>General Considerations</i>	300
B <i>Proper Product Market a Prerequisite</i>	302
C <i>"A Market in Australia"</i>	304
D <i>Present Facts, Statutory Language and Use of Results</i>	305
II ORTHODOX APPROACHES	307
A <i>Price Relationships</i>	307
B <i>Normal Sales and Purchase Patterns</i>	308
C <i>Particular Factors</i>	311
(1) <i>Transport Costs</i>	311
(2) <i>Legal Barriers</i>	313
(3) <i>Customer Convenience and Preference</i>	314
(4) <i>Trader Perceptions</i>	315
III THE LIFO-LOFI APPROACH	316
IV MARKET SIZE, IMPORTS AND EXPORTS	320
A <i>The Size of the Market</i>	320
B <i>Foreign Production</i>	321
V CONCLUSIONS	321

I NATURE AND FUNCTION OF GEOGRAPHIC MARKET DEFINITION

The notion of the relevant market, together with the process for identifying it, is a construct used in competition law in order to determine whether competition exists between two or more producers for the purposes of Part IV of the Trade Practices Act 1974 (Cth).

This legislation confers upon the courts and the Trade Practices Tribunal the duty to decide whether certain courses of conduct have the purpose, or have (or are likely to have) the effect, of substantially lessening competition in a market. The market delineation process provides the first in a set of stepping-stones which enable the courts to discharge this task in the principled and certain manner that is required by the doctrine of the rule of law. The procedures comprised within it enable the court (or other trier of fact) to organise complex fact situations and classify them in such a way as to enable competition policy, as embodied in legislation such as the Trade Practices Act, to be intelligently applied. It permits a degree of quantitative evaluation which in practice would not be possible if the lessening-of-competition issue were attacked directly.

In all systems of competition law it is accepted that the relevant market has three dimensions: the product market, the functional level (such as manufacturing or importing, wholesaling, or retailing) and the geographic

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market. The product market has been dealt with in an earlier issue of this journal.¹ The functional level seldom presents problems of definition and is often subsumed in the analysis of the product market. The geographic dimension is just as important as the product aspect but, unaccountably, it has not received the same attention in the cases or commentaries, although there are signs in other jurisdictions of increasing interest in it.

This article will concern itself with the geographic element. It will seek to draw together the Australian and relevant overseas case-law and literature with a view to identifying the most suitable tests and approaches for delineating the geographic market. At the same time, it will examine the decisions of the Federal Court of Australia, the Trade Practices Tribunal and the Trade Practices Commission in order to see whether the tools of market analysis actually being used in Australia are the best available from the viewpoint of accuracy and legal certainty.

A General Considerations

To an economist, a market is essentially the arena for the interplay of primary demand and supply forces. This conception corresponds largely with its legal meaning today. But when the market concept made its first appearance in a legal setting, in *Standard Oil Co of New Jersey v United States*,² its content was much less certain and it was referred to virtually in passing. In the *Standard Oil* case itself this was no doubt because, on any view, the monopoly power of the old Standard Oil trust was obvious and inescapable.

For some time after *Standard Oil*, the monopolisation cases brought before the courts involved defendants whose market dominance was no less obvious than Standard Oil's. Consequently, the relevant market notion developed only slowly. It was not until the mere possession of monopoly power was found to constitute a *prima facie* breach of section 2 of the Sherman Act in the *Alcoa* case in 1945 that it became necessary for the courts to perform an economic analysis of the defendant's market power.³

Professors Areeda and Turner in their widely-used treatise on antitrust law state that the dimensions of the geographic market turn on the "ability of firms to sell beyond their immediate locations".⁴ But this statement, while true as far as it goes, is potentially misleading, for it tends to emphasise the supply side of the observed transactions at the expense of the demand side. Since the market is the arena for the interplay of primary supply and demand forces, emphasizing one side at the expense of the other can, and not infrequently does, lead to error. Thus, although the supply of rare books might be concentrated in Sydney and Melbourne, the relevant market would not be confined to those two cities because the demand is probably nation-wide. The buyers could be resident anywhere in the continent and their purchases could readily be forwarded to them. Conversely, the primary

¹ G de Q Walker, "Product Market Definition in Competition Law" (1980) 11 FL Rev 386 (hereinafter cited as *Product Market*).

² (1911) 221 US 1, 106.

³ (1945) 148 F 2d 416; W Upshaw, "The Relevant Market in Merger Decisions: Antitrust Concept or Antitrust Device?", (1966) 60 Nw UL Rev 424, 428-434.

⁴ P Areeda and D Turner, *Antitrust Law* (Boston 1978), Vol 2, 355. One of the authors refers to this work as "the Bible": D Turner, "The Role of the 'Market Concept' in Antitrust Law" (1980) 49 Antitrust LJ 1145, 1147.

wholesale demand for black opals in New South Wales may be located in Sydney, but the geographical market is much wider than Sydney because of supply factors. If for some reason the price of opals were low in Sydney compared with other cities, few or none would be supplied in Sydney.⁵ On the other hand, the fact that buyers from all over Australia may come to Sydney to buy a particular product is not enough to make the market a national one if the supply is local. The Federal Court erred in this respect in *Radio 2UE Pty Ltd v Stereo FM Pty Ltd*,⁶ when considering a joint rate-card issued by two Sydney FM radio stations. "The relevant market in this case", Lockhart J said, "is not the radio listening audience, but the advertisers, including advertising agencies, for whose business radio stations compete. The market comprises advertisers throughout Australia".⁷ In reaching his conclusion that the market was national in scope, Lockhart J gave weight to the fact that "Many of the advertised products are sold throughout Australia".⁸

It is clear that the judge looked solely at demand-side considerations to the exclusion of the characteristics of the supply side, and may even have been misled into studying the market in which some of the advertisers, rather than the defendant radio stations, were trading. Unlike opals or rare books, radio advertising time in various locations is not fungible. An advertiser who wants to reach a Sydney audience will not regard air time on Brisbane radio as a substitute.

The point becomes clearer if one looks at the decision of the Commission on the authorisation application of the Australian Associated Stock Exchanges.⁹ The Commission pointed out that while most securities transactions took place in Sydney and Melbourne, this was only because buyers and sellers in other parts of the country channelled their business through those centres: "An order lodged in one capital city may be fulfilled or matched in another city if that is in the client's best interest. The geographical dimension of the stock market is essentially Australia-wide".¹⁰ It does not matter to an investor whether the shares that he buys in a particular corporation come from Sydney or Perth; but this is not true of radio advertising services.¹¹

A simple way of reminding oneself to take both supply and demand into account might be to identify the places of residence of buyers and sellers, rather than simply the places where they meet to do business or where the exchange takes place. It would then be quite apparent that Sydney and Melbourne would simply be focal points of a *national* market for rare books, or securities listed on the stock exchange, or the like; but they would

⁵ K Elzinga and T Hogarty, "The Problem of Geographic Market Delineation in Anti-Merger Suits", (1973) XVIII Antitrust Bulletin 45 (hereinafter cited as "Elzinga I"), 47-48.

⁶ (1982) 3 ATPR 43,912.

⁷ *Ibid* 43,916.

⁸ *Ibid*.

⁹ *Australian Associated Stock Exchanges* [1982] ATPR (Com) 55,431.

¹⁰ *Ibid* 55,441.

¹¹ *Cf Amalgamated Television Services Pty Ltd* [1980] ATPR (Com) 17,076; *United States v Columbia Pictures Corp* (1960) 189 F Supp 153, 192-193; *Times—Picayune Publishing Co v United States* (1953) 345 US 594; see Walker, "Current Topics", (1980) 54 ALJ 57.

be actual markets for goods or services that could not be brought in from elsewhere or delivered to other parts of the country.

In delineating the geographic market we are really seeking to identify an area which includes a sufficient number of the sellers of the product for them to have, if they chose to act in collusion, enough monopoly power to raise prices to a significant degree, and hold them there in the short to medium term, without attracting a sufficient flow of supply from outside to restore prices to earlier levels.¹² This area will be one which is protected from outside competition by distance, statutory restrictions or other barriers. The terms "significant degree" and "short to medium term" are relative concepts which obviously involve assumptions about degree and time. These have been discussed previously.¹³

As in the case of the product market, there should be only one in each instance, not several. If we find a monopoly operating in two separate geographic markets, we are really faced with two monopolies.¹⁴ A single monopoly cannot exist by reference to several relevant geographic markets, any more than several monopolies could exist by reference to a single geographic market. In *Dandy Power Equipment Pty Ltd v Mercury Marine Pty Ltd*,¹⁵ Smithers J appeared at one point to be adopting a proposition agreed to by both sides to the effect that there were in that case two geographic markets for the retailing of outboard motors, one State-wide and one extending 16 kilometres from Dandenong.¹⁶ Later in the judgment, however, it becomes reasonably clear that the two definitions were being treated, by common consent, as alternatives.¹⁷

But while there should be only one, there is no need for the geographic market area to be continuous. In *Howard Smith*,¹⁸ the Trade Practices Tribunal found a single nation-wide market for tug towing services for ocean-going ships, even though the services were rendered in ports that were widely separated. This decision is open to criticism on other grounds, as we shall see, but in this respect it is consistent with accepted doctrine.¹⁹

B Proper Product Market a Prerequisite

The product market and the functional level must be carefully defined before one turns to the geographical aspect. Difficulty and confusion can occur otherwise. In *Trade Practices Commission v Ansett Transport Industries (Operations) Pty Ltd*,²⁰ the Federal Court was considering under s 50 of the Trade Practices Act the acquisition by a major airline of the leading car rental company. The relevant product market was held to be the service of hiring motor cars without the services of a driver. The court did not say whether the product market consisted of operators carrying on

¹² This rule of thumb has received recognition in the 1982 *Merger Guidelines* issued by the United States Department of Justice and Federal Trade Commission: (1982) TRR No 546, 15.

¹³ *Product Market*, 390-392.

¹⁴ G Brown, "Relevant Geographic Market Delineation" [1979] Duke LJ 1152, 1181.

¹⁵ (1982) 3 ATPR 43,872.

¹⁶ *Ibid* 43,888.

¹⁷ *Ibid* 43,901.

¹⁸ *Re Howard Smith Industries Pty Ltd* (1977) 28 FLR 385; 1 ATPR 17,324, 17,336.

¹⁹ See *eg Brown Shoe Co v United States* (1962) 370 US 294; *Andra Investments* [1975] ATPR (Com) 8,806.

²⁰ (1978) 32 FLR 305, 2 ATPR 17,705.

business on a nation-wide basis, or on a smaller-scale local basis, or both. This omission created difficulties in defining the geographic market. Of the 160 car rental businesses conducted throughout Australia, most carried on business within a limited geographical area such as a capital city, a country centre, a town or a region. A limited number of national operators conducted their activities on an Australia-wide basis. It was submitted on behalf of the Commission that the case was concerned with the national car rental market, that is to say the market constituted by the operators who conducted their business on a national basis throughout Australia. The Commission pointed to the more elaborate and integrated nature of the service offered by the national operators—but these considerations went to the product market, not the geographic.²¹ The respondents replied that there was only one car rental market throughout Australia and within this market all car rental operators competed. The court preferred the respondent's view, commenting that "[i]n all areas within Australia there is substitutability for the service provided by the national operators and the local operators providing that service in that area".²²

If the product market had been fully defined, the apparent difficulty in delineating the geographic market might have been avoided. With the relevant product market defined as car renting on a *nation-wide* basis, the geographic market would clearly have been seen to be the whole of Australia. If instead it were *all* car renting, nation-wide, regional and local, then on ordinary principles there would either have been a single Australia-wide market or a series of local markets centred on urban areas. It would have been the former if, for example, a valid analogy could have been drawn with *Howard Smith*,²³ in which the Tribunal found a single national market for tug-boat services, rather than a series of markets each consisting of a separate port, even though a sizeable minority of the tugs in service were owned by local operators. The decisive factors in *Howard Smith* were the tendency of shipping lines to patronise the same tug boat company at all Australian ports in which they operated, and perceived substitutability in production—the relative ease with which suppliers of towing services could redeploy tugs at other ports. On the other hand, there would have been a series of local markets in *Ansett* if the evidence had shown that the operators in a particular urban area faced little or no competition from outside the area; but, given the importance of regional operators and the apparent ease of redeployment of rental cars, this was perhaps less likely.

In the *BHP-Koppers* case,²⁴ the Tribunal made an error in product market definition which was potentially even more serious for geographic delineation. At issue was a twenty years-plus exclusive dealing agreement under which Koppers was to buy all the steel-works coal tar and naphthalene oils produced by BHP and its subsidiary, Australian Iron and Steel. BHP was the sole producer of steelworks tar, but gasworks tar was a substitute

²¹ Cf *Marnell v United Parcel Service*, 1971 Trade Cases 73,761.

²² 2 ATPR at 17,710; G Werden, "The Use and Misuse of Shipments Data in Defining Geographic Markets" (1981) XXVI Antitrust Bulletin 719, 725-727.

²³ (1977) 1 ATPR 17,324.

²⁴ *Re Broken Hill Proprietary Co Ltd* (1981) 3 ATPR 42,807.

for some purposes. Koppers used the tar to make electrode-pitch, naphthalene, carbon black feedstock, creosote, enamel and road tars. International trade in steelworks tar was rare, and BHP, as the Australian monopolist, benefited from a high degree of natural protection together with a 13 per cent import duty.²⁵ International trade in gasworks tar was apparently non-existent. The processed products made from these tars, however, were frequently traded internationally,²⁶ and the Tribunal included them all in the relevant product market.

Once the Tribunal had lumped together in the same product market both the product which was the subject of the impugned agreement and the processed products made from it, confusion in relation to the geographic market was inevitable. The language of the judgment confirms this: "As to the geographic market, the evidence is that it is somewhat uneven in scope. In part it is national; but, in part, international".²⁷ Elsewhere the Tribunal described the market as "quasi-international" and went on to add that "We do not find it helpful to confine our attention too narrowly upon the domestic scene".²⁸ If a product and its own derivatives are bracketed together—even though they are not mutually substitutable and not produced on the same equipment—the resulting geographic market is bound to be a bad fit for either the product or the derivatives or both. At one point in the *Koppers* judgment it seemed that the Tribunal might yet save the day. It distinguished two functional levels, the market for the crude tar and the market for the derivatives.²⁹ On normal principles, two separate functional levels equals two separate markets. But notwithstanding this valid insight, the Tribunal went on to define geographic market in the way described.³⁰

C "A Market in Australia"

Unfortunately, this is not the end of the list of uncharacteristic market definition aberrations in *Koppers*. The market was described, it will be recalled, as being partly national and partly international. This would appear to mean that certain other countries, or parts of other countries, were regarded as forming part of the geographic market. But s 4E of the Act defines "market" as "a market in Australia". Now it is true that s 102(4), which contains the test to be applied by the Tribunal in determining appeals from the Commission's decisions, does not mention the word "market", and it could therefore be argued that the Tribunal in the performance of its function was not bound by the definition in s 4E. On the other hand, s 102(4) does require the Tribunal to weigh any detriment constituted by any "lessening of competition", and such an inquiry cannot be pursued without first delineating the market in which competition may have been reduced. There are thus arguments both ways. But the Tribunal did not even address itself to the problem. Indeed, there is, inexplicably, no mention of s 4E anywhere in the judgment at all.

²⁵ *Ibid* 42,835.

²⁶ *Ibid* 42,824-42,825, 42,835.

²⁷ *Ibid* 42,825.

²⁸ *Ibid* 42,828.

²⁹ *Ibid* 42,825.

³⁰ A similar error was made in the Canadian case *R v KC Irving Ltd* (1976) 45 DLR 3d 45, 76; see R Roberts, *Anticompetitive and Antitrust* (Toronto 1980), 114-115; *Product Market*, 392-393, 401.

A comparison with the recent American case *United States v Tracinda Investment Corporation*³¹ highlights the error. The market for the production of motion pictures was found in that case to be world-wide, because foreign produced films competed directly with those made in the United States, while American companies derived much of their income from foreign distribution. The entire world was the market area in which motion picture producers operated and to which the distributors of films could practicably turn for supplies of motion pictures. However, the court added in a footnote that this did not mean that the court would look to the world-wide effects of the conduct for all purposes; s 7 of the Clayton Act referred to a lessening of competition in any section of "the country". The court's conclusion rested, it declared, on a recognition of the extent to which the world-wide nature of the film industry affected competition in the United States.

D *Present Facts, Statutory Language and Use of Results*

Assuming that we have correctly defined the product market and the functional level, we should then note three further preliminary points. First, if we are to be consistent in treating the relevant market as the cockpit for primary market forces, we should ensure that the material on which we rely consists of present facts, rather than future projections. Potential or projected competitive facts have a place later on in the process of evaluating whether there has been a substantial lessening of competition, but not at the market definition stage. The Tribunal's decision in *Howard Smith*³² appears to have erred in this respect. The question was whether there was an Australia-wide market for towage services provided by large tugs, or whether each port could be said to constitute a separate and distinct market (with Sydney and Botany Bay being treated as one). The companies argued (and the Tribunal appears to have accepted this much) that there were significant differences between ports and that the movement of tugs between ports was infrequent, and usually uneconomic as a short-term exercise.³³ The Tribunal went on to find that the market was Australia-wide, but the considerations underlying its choice appear not to be present facts, but inferences of a speculative kind about potential competition in the future. On the demand side, the Tribunal opined that since the major tug companies each operated at several different ports around the country, shipping lines which patronised a particular tug operator at one port "may be expected to patronise the same company at other Australian ports". The Tribunal continued, "If a shipping line transfers its towage business to another tug operator at one port, *it would not be surprising* if it also transferred to that operator at other ports". On the supply side, the Tribunal relied on the proposition that "the major tug operators *are in a position* to deploy a newly-constructed tug at any one of a number of ports". Again:

*The opportunity has arisen, particularly in recent years, for tug operators to move into newly-developed ports . . . Evidence before the Tribunal suggested the possibility that one or more of the major tug operators might offer shipping lines an Australia-wide contract rate . . .*³⁴

³¹ 1979 2 Trade Cases 79,138, 79,147.

³² (1977) 1 ATPR 17,324.

³³ *Ibid* 17,326.

³⁴ *Ibid* 17,336, (italics added).

In our view there is a *greater likelihood* of such contract rates coming about if Howard Smith and Adelaide came [sic] together in the proposed merger. Thus the significance of the Australia-wide market *could be even greater in the future*.³⁵

The market was thus delineated by reference to future possibilities rather than present commercial realities.

Secondly, there is a caveat to be borne in mind when one is drawing on the United States cases. Most questions of market definition under the United States anti-trust laws arise either under s 2 of the Sherman Act, which prohibits monopolisation, or under s 7 of the Clayton Act, the anti-merger provision. A breach of s 2 is a felony, but the main remedy for a contravention of s 7 is injunctive relief. Partly for this reason, and partly because of certain differences in wording, the criteria for market definition under s 7 tend to be much more elastic than those under s 2. Although there has been some suggestion that the tests for determining the product market are the same under both sections,³⁶ the two lines of geographic market criteria have remained to a great extent separate.³⁷ Since the substantive provisions of Part IV of the Trade Practices Act do carry heavy financial penalties, and do use the term "market" explicitly, rather than some looser expression such as the words in s 7 "any line of commerce in any section of the country", the principles developed under s 2 are probably more appropriate for our purposes. Nonetheless, cases under s 7 such as *Brown Shoe Co*³⁸ can be useful sources of guidance provided that we keep this caveat in mind, and provided in particular that we do not make use of the "sub-market" notion in the illogical and misleading sense in which it has been used in s 7 cases.³⁹

Finally, it should scarcely be necessary to say that once the market has been defined, that definition should then be applied in the consideration of competitive effect. The point has to be made, however, because it was overlooked in *Hecar Investments No 6 Pty Ltd v Outboard Marine Australia Pty Ltd*.⁴⁰ In that case Franki J defined the geographic market for outboard motors as being the central coast of New South Wales.⁴¹ But on the question of whether exclusive dealing had substantially lessened competition in that market, his Honour held that it had, simply on the ground that the consumer was denied the opportunity of seeing different makes of motor side by side in the same store.⁴² The buyer's propensity to visit other stores elsewhere in the central coast area, or even across the street, was treated as zero. In effect, the geographic market was treated as irrelevant. This judgment has since been overturned by the Full Federal Court.⁴³

The stage having been, one hopes, properly set, the geographic market

³⁵ *Ibid* 17,337, (italics added).

³⁶ *United States v Grinnell Corp* (1966) 384 US 563.

³⁷ *United States v Pabst Brewing Co* (1966) 384 US 546.

³⁸ *Supra* n 19.

³⁹ Upshaw, *supra*, n 3, 461; R Posner, *Antitrust Law* (Chicago 1976), 129-130; Areeda and Turner, *supra* n 4, 411; *Product Market* 414-416.

⁴⁰ (1982) 3 ATPR 43,699.

⁴¹ *Ibid* 43,703.

⁴² *Ibid* 43,705.

⁴³ *Outboard Marine Australia Pty Ltd v Hecar Investments No 6 Pty Ltd* (1982) 3 ATPR 43,980.

performance can now begin. But there are two possible scenarios to choose from. The first is the orthodox approach currently in general use in all jurisdictions. The second is a new and somewhat untested, but promising, approach known as "LIFO-LOFI". We may now consider each of these in turn.

II ORTHODOX APPROACHES

A *Price Relationships*

According to Areeda and Turner,⁴⁴ the main determinants of the geographic market are price relationships and actual sales patterns. Price relationships they regard as being the more important factor of the two. "When prices and price movements in two territories are closely correlated, a single market definition is strongly indicated". It is not necessary that prices should be identical: "high correlation of the direction and amount of price changes would ordinarily be enough".⁴⁵ While admitting that price data can be ambiguous and sometimes need supplementing with additional evidence, the authors adhere to the view that price relationships are the best single guide to geographic market definition; and indeed, "in many if not most cases they will be quite sufficient, particularly where one has data for an extended period of time".⁴⁶ Then, without acknowledging any difficulty in identifying *the* price or *the* transport charge for the areas under examination, the authors launch into an elaborate analysis of models based on comparisons of various combinations of prices, transport costs and cross-shipment data.

This exercise, however, is performed in an entirely abstract way, and the authors do not cite a single case in which the principles as they enunciate them have been applied, or even a real fact-situation in which they *could* have been applied if the matter had come before a court. Indeed, it is difficult to think of a single instance, whether in the United States, Australia or the Common Market, where price relations have played a decisive part in geographic market definition.

Such seeming neglect on the part of the courts is in fact quite justifiable, for a number of reasons. First, there is the practical difficulty of how to identify *one* price and *one* transport rate in each of the territories in issue which could be used for the purposes of the Areeda-Turner analysis. Prices may be difficult to compare, *inter alia* because of the practice of freight absorption. As a practical matter, reliable price information is unlikely to be available for anything other than agricultural products, but these are seldom the subject of competition litigation. Freight rates may also be elusive, particularly in a field which is as competitive as road transport in Australia. Secondly, this analysis is to a considerable extent based on assumed patterns of behaviour which are found only in competitive markets. It is only where competition is unhindered that a market can be defined by identifying the buyers and sellers who are "in such free intercourse with one another that the prices of the same goods tend to equality easily and

⁴⁴ *Supra* n 4, 355-358.

⁴⁵ *Ibid* 355.

⁴⁶ *Ibid* 357.

quickly”, as Alfred Marshall put it.⁴⁷ But identical or correlated prices may also be the result of a pattern of price discrimination by a monopolist in one market or in several different markets. In such a case, the prices paid by two groups of buyers may be identical, not because they are in the same market, but because their demand elasticities are approximately equal.⁴⁸ Conversely, the price uniformity criterion could lead us to conclude, wrongly, that price differentials indicate separate geographic market areas, whereas in fact they are discriminatory prices charged within the same geographic market area. Since problems under the Trade Practices Act or similar legislation usually arise in markets that are not competitive, this is a most serious objection. Finally, an appearance of correlation could be produced by a common reaction to a change in external factors, or to unrelated changes in demand or supply in two separate markets.⁴⁹

B *Normal Sales and Purchase Patterns*

A much more widely used indicator is the normal spatial pattern of sales and purchases. A completely localised pattern usually indicates a separate geographic market. Such, in the view of the Trade Practices Tribunal, was the case in *Re G & M Stephens Cartage Contractors Pty Ltd.*⁵⁰ The greater Melbourne region was to be regarded as a geographical entity in the pre-mixed concrete industry, because there were “no production plants of consequence making forays from outside”, nor, apparently, was any pre-mixed concrete delivered from the Melbourne plants to points outside that area.

Occasional shipments in or out of the region would not affect the conclusion, particularly if they occurred only during periods of shortage, or when prices were temporarily high enough to cover transport costs.⁵¹ Our concern is with normal conditions, with identifying the choices to which a buyer or seller may practicably turn.

This pragmatic emphasis is necessary because too much reliance on strict logic will prevent us from ever defining a market at all. If price differentials are large enough, buyers or sellers will be prepared to travel much further than normal. Practicable alternatives are therefore partly a function of price.

But exchanges take place in the practical world, not in the world of pure logic. Therefore, as with product market definition, we can nevertheless construct a valid geographic framework for competition analysis if we identify a significant gap in the chain of substitution, without concerning ourselves too much with the question of how far all things are “imperfect substitutes for each other”.⁵² At this point, the assumptions about time and degree referred to earlier will come into play.

All courts seem to attempt to have regard to this important factor of sales and purchase patterns. In the United States, failure to do so attracts

⁴⁷ A Marshall, *Principles of Economics* (8th ed 1920), 324-325.

⁴⁸ P Steiner, “Markets and Industries”, *International Encyclopaedia of the Social Sciences* (New York 1968) Vol 9, 575, 577.

⁴⁹ Areeda and Turner, *supra* n 4, 356.

⁵⁰ (1977) 1 ATPR 17,445, 17,460.

⁵¹ Areeda and Turner, *supra* n 4, 358.

⁵² See *Product Market*, 400.

severe criticism. One instance was the Department of Justice Merger Guidelines of 1968, which were prepared to treat as a market any commercially significant community or section of the country, unless it clearly appeared that there was no "economic barrier" (such as significant transportation costs, lack of distribution facilities, customer inconvenience, or established consumer preference for existing products) that would hinder the sale from outside that area to purchasers within it.⁵³ The Task Force on Productivity and Competition, reporting in the following year, found this definition "so loose and unprofessional as to be positively embarrassing".⁵⁴ The Task Force argued that this was a misleading test: "An industry may be riddled with the kind of 'barriers' cited in the Guidelines and yet still not contain any meaningful local markets".⁵⁵

Professor Posner likewise found the Guidelines' enunciation of the principle too narrow, in part, it would seem, because no reference was made to the incidence of sales from outside the putative market. In his view, all sales from plants that had recently made some significant sales in the area should be included in the market, unless those sales from more distant plants had been made only in periods of shortage when prices in the local area were high.⁵⁶ Again, the Supreme Court's decision in *Pabst*,⁵⁷ in which sales and purchase patterns were not discussed at all, has been described as "wholly unsatisfactory"⁵⁸ and even as "a fit of nonsense".⁵⁹ The 1982 Merger Guidelines issued jointly by the Department of Justice and the Federal Trade Commission have corrected this error in the 1968 version.⁶⁰

In the Common Market also, sales and purchase patterns are significant factors. In the *Sugar* case,⁶¹ the Court of Justice, after considering among other things the amount of sugar consumed in member countries as opposed to the amount which found its way into interstate trade, concluded that the individual member States, and not the Common Market as a whole, constituted the appropriate geographical areas.⁶²

The same holds true in Australia. In the *Pak Pacific-Paper Tubes* case,⁶³ the fact that the whole of the output of the parties' paper-board plants was generally sold within the State of manufacture was one of the considerations which pointed to the existence of separate State markets rather than a national or regional one.⁶⁴

However, the Trade Practices Commission occasionally reaches opposite results in successive decisions dealing with the same product. In *re Tooth & Co*⁶⁵ (and several later decisions were to the same effect), the Commission

⁵³ (1969) 1 Journal of Reprints for Antitrust Law and Economics 181, 184.

⁵⁴ *Report of the Task Force on Productivity and Competition* (The Stigler Report) (1969) 1 Journal of Reprints for Antitrust Law and Economics 827, 846-847.

⁵⁵ *Ibid* 847.

⁵⁶ *Supra* n 39, 133.

⁵⁷ *United States v Pabst Brewing Co* (1966) 384 US 546.

⁵⁸ Areeda and Turner, *supra* n 4, 415.

⁵⁹ Posner, *supra* n 39, 130.

⁶⁰ *Supra* n 12, 21-25.

⁶¹ *Re the European Sugar Cartel* (1975) 17 CMLR 295.

⁶² *Ibid* 451-452.

⁶³ [1975] ATPR (Com) 8,841.

⁶⁴ *Ibid* 8,842.

⁶⁵ [1977] ATPR (Com) 16,718.

(and later the Tribunal⁶⁶) found that New South Wales was the relevant market for beer⁶⁷ whereas earlier in the *Tooheys-Guinness* clearance decision,⁶⁸ the Commission had found an Australian market for beer and stout.⁶⁹ It may be possible to reconcile these decisions on the basis that the *Tooth* case was chiefly concerned with draught beer, which is seldom exported to other States, whereas the *Tooheys-Guinness* decision related to packaged beer, and a premium product at that, which was more likely to be marketed nation-wide, and in fact was. It is much more difficult to reconcile the *Howard Smith* authorisation determination,⁷⁰ in which the Commission (and the Tribunal) found a nation-wide market for the services of large harbour tugs, with the *Fenwick* determination⁷¹ in which the market for the same product was limited to the New South Wales ports of Sydney-Botany Bay, Eden and Newcastle.

In some cases the actual service area of the relevant supplier will determine the spatial boundaries of a market. It is difficult to quarrel with the Commission's finding in *Amalgamated Television Services*⁷² that the relevant market for assessing the effect of a grant of television rights to a Sydney channel was the Sydney viewing area.⁷³ The Tribunal's confining the market for the New South Wales brewers to their actual service areas in *Tooth & Co*⁷⁴ also seems to be justified in view of the difficulty of transporting bulk beer over long distances.

But the service areas of the parties will be co-extensive with the spatial limits of the market only if there are no other sellers who make significant sales throughout a larger region.⁷⁵ In *Trade Practices Commission v Nicholas Enterprises*,⁷⁶ the geographic market for packaged beer at the retail level was found to be the Adelaide metropolitan area. Some outlets competed only in their local areas, but there was also competition between the local suppliers and the larger retailers who supplied throughout the metropolitan area.⁷⁷ The same principle can be seen at work in *Trade Practices Commission v Ansett Transport Industries*,⁷⁸ where local car rental operators competed on almost an equal basis with the nation-wide companies.

By contrast with the principles governing product market definition, there is no need for symmetry before two geographic areas can be treated as part of the same market. Thus, in *Email/Simpson*,⁷⁹ the Commission fixed on a nation-wide market in whitegoods such as refrigerators and washing

⁶⁶ (1979) 2 ATPR 18,174, 18,198-18,199; see also *Carlton & United Breweries* [1981] ATPR (Com) 56,501; *Residential Developments Pty Ltd/Swan Brewery Co Ltd* [1982] ATPR (Com) 55,407.

⁶⁷ [1977] ATPR (Com) 16,718, 16,761.

⁶⁸ [1975] ATPR (Com) 8,809.

⁶⁹ *Ibid* 8,811.

⁷⁰ (1977) 1 ATPR 17,324.

⁷¹ *J Fenwick & Co Pty Ltd* [1976] ATPR (Com) 16,507.

⁷² [1980] ATPR (Com) 17,076.

⁷³ *Ibid* 17,086. Cf *United States v Columbia Pictures Corp* (1960) 189 F Supp 153; *United States v Marine Bancorporation, Inc* (1974) 418 US 602, 619-623.

⁷⁴ [1977] ATPR (Com) 16,718.

⁷⁵ *Borough of Lansdale v Philadelphia Electric Co* (1982) 43 ATRR (USA) 938.

⁷⁶ (1979) 2 ATPR 18,333.

⁷⁷ *Ibid* 18,356-18,358.

⁷⁸ *Supra* n 20.

⁷⁹ [1981] ATPR (Com) 55,201.

machines, notwithstanding that the supply to, for example, the western part of the continent, would be purely one-way.

From this proposition, Areeda and Turner draw the corollary that market definition will vary depending upon what is at issue. Let us assume that there is a small manufacturer of whitegoods in Perth who supplies part of the Western Australian market but who would be at a serious disadvantage in attempting to sell in the eastern States because of its higher material costs and the cost of transport. If the issue were the conduct of the Perth producer, the market would include the sales of both the western and eastern producers. If the issue were the conduct of the eastern producers, the Perth manufacturer would, in their view, be excluded from the market.⁸⁰ It is difficult to see the justification for this reasoning, which seems to assume that a producer must be selling throughout the market if it is to be included within it. This is not a view accepted by the courts in the United States⁸¹ or, as we have seen, in Australia.⁸² It is also inconsistent with the "LIFO-LOFI" test, which is discussed below. (Whether this last point is a fair objection will depend, of course, on whether we conclude that LIFO-LOFI is itself an acceptable test.)

C Particular Factors

(1) Transport Costs

While sales and purchase patterns are perhaps the most important general test of a geographic market, a number of specific factors have also been used by courts, tribunals and commissions to supplement, or substitute for, that general standard. The most important of these is the transport cost factor. This has loomed large in American cases since as far back as 1898⁸³ and is used as a standard variable in Common Market cases.⁸⁴ As the European Court of Justice put it in the *Ruhr Coal Case*,⁸⁵ "all producers of heavy goods, in principle . . . enjoy a margin of geographic protection within which they have the power to determine prices".⁸⁶

In Australia, where great distances can make transport costs loom particularly large, this factor has, as one would expect, been given great weight. The Trade Practices Tribunal in *Re Southern Cross Beverages*⁸⁷ found that because the cost of physical distribution of soft drinks is high in relation to their value, market areas tend to develop around the location of each soft drink manufacturing plant. Thus, the organisational structure of Cadbury-Schweppes in New South Wales recognised the Sydney metropolitan area, Newcastle and the Hunter Valley, and Canberra and environs as three distinct market areas. Other major producers were structured on similar lines.⁸⁸

⁸⁰ *Supra* n 4, 356.

⁸¹ *Eg RSR Corp v Federal Trade Commission*, 1979 2 Trade Cases 78,433.

⁸² See *TPC v Nicholas*, *supra* n 76.

⁸³ *United States v Addyston Pipe and Steel Co* (1898) 85 Fed 271.

⁸⁴ *Europemballage Corp & Continental Can Co Inc v EC Commission* [1973] CMLR 199; *United Brands Co v EC Commission* [1978] 1 CMLR 429.

⁸⁵ *Ruhrkohlen Verkaufs—GMBH v High Authority* [1962] CMLR 113.

⁸⁶ *Ibid* 154.

⁸⁷ (1981) 3 ATPR 42,737.

⁸⁸ *Ibid* 42,758.

A singularity of the *Southern Cross Beverages* judgment was the way in which the barrier presented by transport costs was partly offset by television coverage. Consumer preference for soft drinks, the Tribunal found, was primarily fashioned by advertising and promotion. This fact had implications for the geographic dimensions of the market:

There are distinct television reception areas and for a soft drink manufacturer to extend his market from a regional television viewing area into an adjoining metropolitan or more populous viewing area is likely to involve an amount of expenditure which it would be difficult to recover from additional sales. On the other hand a manufacturer in a large media area would find it easier to expand into a smaller adjacent media area.⁸⁹

In other words, since advertising is a distribution cost just like transport, the availability of television advertising would help to offset some of the transport costs and would enlarge the size of the geographic market.

Transport factors also prevailed in *re Tooth & Co.*⁹⁰ Bulk beer was not only expensive to transport, it was also perishable in transit. This was the major factor in confining the bulk beer market to the "Lesser New South Wales area".⁹¹ Conversely, in *QCMA*,⁹² the Tribunal did not believe that the costs of transporting flour were so high as to warrant dividing Queensland into a number of separate markets. No particular mill would have a freight advantage in supplying a particular region which was sufficient to isolate that region from interpenetration from another. The complexities of Queensland rail freight charges also played a part in this result.⁹³ Australia-wide markets have been found for products having a higher ratio of value to transport costs, such as photocopiers, argon gas and railway rolling stock.⁹⁴ In the case of bank credit card services, transport costs were not a factor at all.⁹⁵

Areeda and Turner declare that the significance of transportation costs as an indicator of separate markets depends entirely on their relation to prices in the areas concerned, and on the presence or the absence of cross-shipments.⁹⁶ While it is true in principle that two areas are ordinarily separate markets when there are few sales between them and where transport costs exceed any price differential, the difficulty described above of identifying the exact price and transportation charges to be used for the purposes of analysis, and the conceptual problems involved, are such that the intricate rules erected by Areeda and Turner on the basis of this premise seem to have little practical value.

Besides helping to delimit the geographic market, transport costs can alter the nature of the product market at higher levels. Higher transport charges will compel a retailer to charge a higher price to the consumer. At

⁸⁹ *Ibid.*

⁹⁰ *Supra* n 74.

⁹¹ (1979) 2 ATPR 18,199.

⁹² (1976) 1 ATPR 17,223.

⁹³ *Ibid* 17,249: see also *Pak Pacific* determination, *supra* n 63.

⁹⁴ *Nashua Australia Pty Ltd* [1975] ATPR (Com) 8,720; *BHP/Linde Gas* [1975] ATPR (Com) 8,608; *Comeng Holdings Ltd* [1975] ATPR (Com) 8,813.

⁹⁵ *Bankcard Scheme: Interbank Agreement* [1980] ATPR (Com) 52,169, 52,178 ff.

⁹⁶ *Supra* n 4, 358.

this higher price, the consumer may regard a physically different and inferior product as a good substitute and will cease buying the product with the high freight component.

This act of substitution shows only that the limits of the geographic market have been reached. But if retailers cease ordering the first product from their wholesalers and switch to the hitherto "inferior" substitute, the first product will, from the point of view of the wholesaler who is shopping for supplies, cease to be a close substitute for the second product. Thus, manufacturers or importers who supply one or other of the two products to the wholesaler will no longer be trading in the same product market.⁹⁷

(2) *Legal Barriers*

A legal restriction on trading in a particular area will have an impact on the extent of the geographic market.⁹⁸ This factor has not yet been decisive in the Australian cases, such restrictions being less common here than they are, for example, in Europe. Section 92 of the Constitution has kept at bay some of the worst forms of neo-mercantilist restrictions in relation to interstate trade, though governments are continually being lobbied by their local cartels and monopolies to seek ways around s 92, sometimes with success. Thanks to a High Court decision giving a narrow construction to s 92 in relation to interstate trade in eggs, a combination of unnecessary but costly weighing and inspecting requirements, together with a campaign of official harassment of interstate competitors, has enabled the Victorian government to preserve intact the monopoly of the Victorian Egg Marketing Board, to the detriment of the consumer.⁹⁹

The full Federal Court in *Parkwood Eggs*¹⁰⁰ thus had no difficulty in holding that Victoria was a geographic market for eggs at the wholesale level and appears to have been quite correct in doing so.¹⁰¹

In the Common Market, statutory restrictions imposed by member-State legislation led to finding national (rather than Common Market-wide) markets in *General Motors Continental*¹⁰² and *European Sugar Cartel*.¹⁰³ In the latter case, the Community rules had consolidated most of the special features of the former national markets.

It has been argued that the legal restriction element must meet two conditions before it will be sufficient to justify singling out a particular area as an appropriate geographic market. First, that the product cannot be imported into the area except under costly or prohibitive conditions. Secondly, customers in the area should not be readily able to go outside and consume the product, or go outside and return to the area with it. If both these conditions are satisfied, then the area is a geographic market for that

⁹⁷ Note, "The Market: A Concept in Anti-Trust" (1954) 54 Col L Rev 580, 598.

⁹⁸ Professor Elzinga takes the view that there are basically only two factors which prevent the market for any product from being worldwide. Transport costs are one and legal barriers the other: Elzinga, "Defining Geographic Market Boundaries" (1981) XXVI Antitrust Bulletin 739 (hereinafter cited "Elzinga III"), 740-741.

⁹⁹ *Pernewan Wright Consolidated Pty Ltd v Trehwitt* (1979) 145 CLR 1; Walker, *Recent Cases* (1980) 54 ALJ 356, 360-362.

¹⁰⁰ *Victorian Egg Marketing Board v Parkwood Eggs Pty Ltd* (1978) 33 FLR 294, 2 ATPR 17,783.

¹⁰¹ *Ibid.*

¹⁰² *General Motors Continental NV v EC Commission* [1976] 1 CMLR 95, 109.

¹⁰³ *Supra* n 61, 451-452.

product.¹⁰⁴ The facts in the *Parkwood Eggs* case would appear to meet both of these criteria. On the other hand, the decision of the European Court of Justice in *United Brands Company v EC Commission*¹⁰⁵ may have erred in excluding France, Italy and the United Kingdom from the EEC geographic market for bananas. Britain and France had statutory systems of preference for the bananas produced by former colonies, France also had some government controls over price, and in Italy a national system of quota restrictions was in operation, pursuant to which imports and the charter-parties relating to the foreign ships bringing the bananas to Italy were also controlled. The court thought that

[t]he effect of the national organisation of these three markets, is that [United Brands'] bananas do not compete on equal terms with the other bananas sold in these States which benefit from a preferential system.¹⁰⁶

Nevertheless, there was no restriction on interstate trade in bananas which had been landed in the Common Market and had paid the Common Customs Tariff of 20 percent, nor could the three countries prevent their own importers from obtaining their supplies direct from non-member countries, provided that they had paid the Common Custom Tariff.¹⁰⁷ United Brands in any case operated successfully in the three excluded countries. Its British subsidiary had 40 percent of the United Kingdom market, and its French and Italian subsidiaries accounted for a large proportion of sales in those countries.¹⁰⁸ The test applied by the court for identifying the relevant market seems to have been inappropriate; it appears to have accepted United Brands' submission that a geographic market comprises only areas where conditions of competition are homogeneous and in which the product competes on equal terms.¹⁰⁹

But it is not necessary for producers to compete on equal terms in order to be part of the same geographic market. The real issue in *United Brands* was whether the national statutory regulations had the effect that sellers within the other six Common Market countries would, if they acted together, have monopoly power because no effective competition could be offered by sellers in Britain, France and Italy. There was nothing to suggest that bananas could not be brought from the three excluded countries into the other six except under costly or prohibitive conditions. It is not necessary to show that sales in the opposite direction would have been practicable since, as we have seen, a one way sales traffic is sufficient. The European Court's thinking might perhaps have been assisted by the study of some Australian cases on s 92 of the Commonwealth Constitution.

(3) *Customer Convenience and Preference*

Customer convenience and preference can narrow the geographic market area. In one sense this may be simply another way of looking at transport

¹⁰⁴ Elzinga I, 67.

¹⁰⁵ [1978] 1 CMLR 429, 484.

¹⁰⁶ *Ibid* 485.

¹⁰⁷ *Ibid* 451-452.

¹⁰⁸ *Ibid* 459.

¹⁰⁹ *Ibid* 484, 485.

costs—but this time the purchaser's transport costs. Thus, purchasers will usually be forced to travel greater distances where higher-priced items are involved because the capital investment required to deal in such items tends to prevent outlets being established in great numbers. The broadest retail market is likely to be that for the high-priced necessity.

But convenience and preference can be factors even in the absence of substantial transportation costs. The Supreme Court in *Philadelphia Bank*¹¹⁰ found that "the factor of inconvenience localizes banking competition as effectively as high transportation costs in other industries".¹¹¹ No doubt this factor also played a part in the Trade Practices Commission's finding that the services of real estate agents were sold in a series of local markets, such as Sydney, Newcastle and Wollongong.¹¹²

Convenience and preference factors may, of course, be affected by changes in other economic circumstances. Thus, in the United States it has been found that the market for corrugated containers now tends to be local because customers increasingly demand deliveries on short notice, presumably, at least in part, because of rising interest rates.¹¹³

(4) *Trader Perceptions*

The perceptions of those who trade in the market are facts which are relevant to the question of geographic market definition. The way in which buyers and sellers tend to see the market says something about the scope and working of competitive forces. Even if these perceptions are mistaken, they may still be relevant as facts which will enable one to predict businessmen's responses to shifts in supply and demand.

In *Trade Practices Commission v Nicholas Enterprises*,¹¹⁴ the only evidence on geographic market was given by the general manager of Coles Stores in South Australia, who was called as an expert witness. He testified to his opinion that a liquor outlet anywhere in the Adelaide metropolitan area would be accessible generally to the public who lived in that area, and would be in competition with other outlets selling there. The witness supported this view with statistics based on the 1971 Census.¹¹⁵

If these perceptions are reflected in the internal organisation of the companies operating in the market, the inference will be even more readily drawn. Thus, in *Pak Pacific*,¹¹⁶ the fact that producers had manufacturing plants in each State and distributed the output from that plant almost exclusively within its borders helped the Commission to draw the inference that there was a series of State-based geographic markets.¹¹⁷ Similarly, in *Southern Cross Beverages*,¹¹⁸ the largest manufacturers of soft drinks either recognised, in their organisational structure, separate markets consisting of the Sydney metropolitan area, Newcastle and the Hunter Valley, and

¹¹⁰ *United States v Philadelphia National Bank* (1973) 374 US 321.

¹¹¹ *Ibid* 358-359, 361.

¹¹² *Real Estate Institute of New South Wales* [1980] ATPR (Com) 52,094, 52,100.

¹¹³ 2 Trade Regulation Reporter 6,470-6,471.

¹¹⁴ (1978) 2 ATPR 18,333.

¹¹⁵ *Ibid* 18,356-18,357.

¹¹⁶ [1975] ATPR (Com) 8,841.

¹¹⁷ *Ibid*.

¹¹⁸ (1981) 3 ATPR 42,737, 42,757.

Canberra with surrounding districts, or at least regarded city and country as separate markets.

Industry recognition must, however, be treated with some reservations, partly because such evidence tends in an adversary situation to be used predictably by the parties, and partly because there is a tendency in business to use the term "market" in a less precise sense than that which it has come to bear in competition law.¹¹⁹

III THE LIFO-LOFI APPROACH

The evidence in relation to any particular factor used in the orthodox "eclectic" approaches may be incomplete or non-existent. It therefore leaves the tribunal of fact ultimately with an act of almost subjective judgment to perform. Orthodox methods do not tell us which factors should receive the most weight, and this can be awkward if the evidence on different factors points in opposite directions. This can happen, for instance, when despite higher transport costs, there are substantial shipments into or out of the hypothetical geographic market. Further, because of the different weight which may be given to the various factors by different courts or tribunals, it is not possible to "replicate" the test and obtain consistent results. The element of discretion and judgment simply plays too large a part.

These and other problems with the traditional eclectic approach have led the economists K G Elzinga and T F Hogarty to propound their "LIFO-LOFI" method.¹²⁰ These abbreviations signify "little in from outside" and "little out from inside". Elzinga and Hogarty point to the pitfalls mentioned earlier connected with using price uniformity as an indicator of the geographic market. Transportation costs they also regard as unreliable because of the difficulty of establishing *the* freight rate, because of the widespread practice of freight absorption and because in practice the inferences to which freight rates may point are often rebutted by evidence of actual cross-shipments.

The usual method of assessing sales and purchase patterns can also lead to error if either the LOFI element or the LIFO element is considered without the other. The reason for this is the proposition mentioned earlier, that symmetry of product movements between two areas is not a prerequisite to their being found to be in the same geographic market. Thus, it would be misleading to treat Sydney as being itself a market for beer simply because nearly all the beer consumed in Sydney is brewed there and very little beer is brought into Sydney from outside (the LIFO element). Once the LOFI element was taken into account, it would become obvious that the market was not Sydney, but New South Wales, since a considerable proportion of the beer produced in Sydney is sent to other parts of the State.

Again, the LOFI element by itself is misleading. This is best illustrated by the *Philadelphia Bank* case,¹²¹ in which the court gave great weight to the fact that the bulk of the business for the commercial banks located

¹¹⁹ *Product Market*, 416-418.

¹²⁰ Elzinga I, developed further in K Elzinga and T Hogarty, "The Problem of Geographic Market Delineation Revisited: The Case of Coal" (1978) XXIII *Anti-trust Bulletin* 1 (hereinafter "Elzinga II") and in Elzinga III.

¹²¹ (1973) 374 US 321.

within the hypothetical market originated from within that area. The flaw in this reasoning is the failure to consider the possibility that customers inside the area might purchase commercial banking services outside it. These people would, in effect, would be bringing the services in from outside.

Similarly, Elzinga and Hogarty find the legal restriction element to be an acceptable indicator only if it meets the two conditions referred to above.¹²²

They point out that all the supply and demand elements which affect price—an important factor in the eclectic approach—also affect quantity, and these quantity figures can be used for estimating market areas more readily than other data. Consequently, the shipment information classified by point of destination and point of origin, which is the raw material for the LIFO-LOFI analysis, should in itself be a sufficient basis for delineating the market.

Elzinga and Hogarty then propose a four-stage test:

1 The analysis should begin by locating the largest of the merging (or colluding) firms. The hypothetical market area will be the minimum area required to account for at least 75 percent of the shipments of the relevant product from that firm or its largest plant. This step should then be taken for each of the other firms who are parties to the relevant conduct.

2 Then one should see whether 75 percent or more of the total sales of this product within the hypothetical area is shipped from plants located within the area. If this is so, the LIFO element has been satisfied and the next step can be taken. If not, the hypothetical market area must be redrawn until it accounts for 75 percent or more of the shipments of the product from all plants within the area. If this test cannot be met, the market is national in scope.

On this basis, the Federal Court was right in rejecting the argument that car rental was confined to a series of local markets. Though local operators were significant, the nationwide companies were of substantial importance throughout the country. The proportion of sales coming into particular cities or towns from outside could not be regarded as “insignificant”. The Supreme Court’s decision in *United States v Grinnell Corporation*¹²³ that central station alarm services were sold in a national market rather than local markets can be supported in the same way (though the Court gave as its reason the fact that the business was operated at a national level). The activities of an individual station were local, as it served only that area which lay within a radius of 25 miles, but it was plain that a national operator could enter any such area and establish its own station; this was in fact how the business was conducted. A putative local market would have failed the LIFO step in the LIFO-LOFI test in *Grinnell* as in *Ansett*.¹²⁴

3 If the LIFO test is met, one should then determine whether at least 75 percent of the shipments by the firms within the hypothetical area are to customers within that area.

4 If both elements have been satisfied, the size of the market can be

¹²² Elzinga I, 67.

¹²³ (1966) 384 US 563.

¹²⁴ (1978) 32 FLR 305, 2 ATPR 17,705.

calculated from total consumption from all shipping points within the hypothetical market area.

The 75 percent figure was intended to be a conservative estimate of the percentage of shipments which would encompass the primary demand and supply forces. In the light of later experience this was increased to 90 percent, a figure which would result in an overlapping among markets. This outcome appeared to be more characteristic of the real world than the gaps between markets which apparently resulted from the use of the 75 percent benchmark.

Criticism from other economists does not so far appear to have dented the LIFO-LOFI method significantly, though it has led the authors to decrease the percentage regarded as "little" from 25 percent to 10 percent.¹²⁵ While it has yet to be tested explicitly in the courts, LIFO-LOFI does appear to be quite consistent with the methods already used. A number of geographic market definitions in Australian cases would have passed a LIFO-LOFI test, and it is even possible that the Tribunal and the Federal Court have in fact applied something very much like it, without actually articulating it as a principle. The *G & M Stevens*,¹²⁶ *Nicholas*,¹²⁷ *Koppers*¹²⁸ and *Tooth*¹²⁹ cases suggest this. Indeed, it is not easy to identify a Federal Court or Tribunal decision which would clearly have failed the proposed test, with the possible exception of *Howard Smith*.¹³⁰ In that case, the market for tug towing services was held to be nationwide, rather than a series of markets in major ports, even though there was no evidence of actual movement of supply or demand in or out of any of the individual ports. At best, there was some suggestion that such movement might take place in the future.

There appears to be nothing to prevent LIFO-LOFI from being used in conjunction with the orthodox eclectic approach, except for the possible increase in the resources required to investigate all factors. This course might well prove attractive to a court or tribunal in the early stages, while the new test was still proving itself. Eventually, if it lives up to the expectations of its proponents, it could replace the eclectic approach altogether, since conceptually all the relevant supply and demand forces embraced by the eclectic method should be subsumed in data relating to quantity, just as theoretically they should be subsumed in price movements, if only one could pinpoint *the* price.

However, sampling techniques might be required in order to cope with the sheer quantity of shipment information available.

But the Federal Court has adopted extremely restrictive conditions for the admissibility of sample survey evidence. At present it requires, *inter alia*, that all interviewees should be available for cross-examination by

¹²⁵ P Griffin and J Kushner, "Geographic Submarkets in Bituminous Coal" (1976) XXI Antitrust Bulletin 67; also Werden, *supra* n 22, and B Benson, "Spatial Competition: Implications for Market Area Delineation in Antimerger Cases" (1980) XXV Antitrust Bulletin 729.

¹²⁶ (1977) 1 ATPR 17,445.

¹²⁷ (1979) 2 ATPR 18,333.

¹²⁸ (1981) 3 ATPR 42,807.

¹²⁹ [1977] ATPR (Com) 16,718.

¹³⁰ *Supra* n 18.

opposing counsel.¹³¹ Given that Privacy Committee guidelines require that this fact be made known at the commencement of the interview to all interviewees (many of whom thereupon eclipse themselves), survey researchers consider that the resulting distortion of the sample makes an "admissible" survey less reliable than an "inadmissible" one prepared in accordance with accepted survey research principles. Therefore, to the extent that LIFO-LOFI requires survey data for manageability, the case-law of the Federal Court is likely to hinder its adoption in Australia, at least in that court. The Tribunal and the Commission are not bound by the rules of evidence, nor would the State Supreme Courts be constrained by a single-judge Federal Court decision, if the Supreme Courts were to be given concurrent jurisdiction in Trade Practices Act matters, as has been suggested by Wilson J, among others.¹³²

The LIFO-LOFI test has been criticised on the ground that it understates the impact of competition from distant suppliers. It is argued that part of the supply and demand forces affecting a particular seller originates in the service areas of distant firms. These can be part of the same market area even if they cannot compete for the same customers and would therefore be excluded by the LIFO-LOFI test because of the absence of cross shipments. Price responses are therefore still the best guide, according to this view.¹³³ But this position would revive all the measurement problems which LIFO-LOFI was designed to circumvent. It also involves assuming, to some extent, that all concerns, even the most distant ones, compete on an equal footing, and this would result in market power being understated. A better approach to distant competition would seem to be to subsume it under the degree factor.

While the Elzinga and Hogarty view has not been specifically applied in any decided cases to date, it has much more in common with the pragmatic methods already in use than the elaborate and highly theoretical models of price comparisons proposed by Areeda and Turner, with their problems of measurement that appear insuperable, especially in the case of services.

None of the methods of market definition in use or proposed is completely independent of its results. Some circularity is inevitable. New South Wales may well be an area in which manufacturers of paper tubes have a degree of monopoly power, and for that reason can be described as a geographic market, but if those manufacturers seek to squeeze the greatest short-term profit out of their market power, customers will start to range further afield in search of supplies at better prices. Illogically, therefore, the notional monopoly power exists only at prevailing prices. Nevertheless, breaks in substitution possibilities do exist for practical purposes and can be identified. "While everything in principle depends upon everything else, in many cases the interactions and feedbacks are small enough to be negligible".¹³⁴ The LIFO-LOFI approach seems somewhat better adapted to

¹³¹ *McDonald's System of Australia Pty Ltd v McWilliams Wines Pty Ltd* (1979) 2 ATPR 18,481, 18,512.

¹³² See Walker, "Competition between Courts—Bane or Bounty?" (1981) 55 ALJ 312.

¹³³ Benson, *supra* n 125.

¹³⁴ Steiner, *supra* n 48, 577.

locating those breaks than the traditional eclectic method and has the further advantage of greater predictability.¹³⁵

IV MARKET SIZE, IMPORTS AND EXPORTS

A *The Size of the Market*

In contrast with the expressed position under Common Market law and the implications derived from the United States law, there is in Australia no general *de minimis* rule requiring either product or geographic market to be of any particular minimum size. Theoretically at least, a market is a market no matter how small it may be. Not only the major cities (for example, *G & M Stevens*¹³⁶) but also second-magnitude cities such as Adelaide (*Nicholas*¹³⁷) and large country centres such as Bundaberg (with a population of 40,000)¹³⁸ have been found to be geographic markets. The north-west region of Tasmania has been delineated as a market for bread¹³⁹ and Darwin, with a present population of some 48,000, has been held to be a geographic market for movie theatres.¹⁴⁰

In the particular case of mergers, s 50(3) requires that the market should be "a substantial market for goods or services in Australia or in a State". This provision has not so far been explained by the courts and the Act provides no guidance as to how substantiality is to be measured.¹⁴¹ In the geographical sense, however, it would appear to mean substantial either in area or population terms, whether by reference to the Commonwealth as a whole or to the State or States in which it is located.

Issues over the size of the market may in some instances merely reflect unsatisfactory product market definition. In *United States v General Dynamics Corporation*¹⁴² it was argued that the defendant's acquisition of a coal producer lessened competition in breach of s 7 of the Clayton Act. The plaintiff had calculated the target company's market share on the basis of coal production or sales. The defence argued successfully that as the bulk of the company's coal reserves were committed to long-term contracts, it could offer present market competition only in relation to the small proportion that remained. The proper measure of its market share, therefore, was the quantity of the reserves currently available for sale on the open market. The problem was simply bad product market definition—the product market should have been clearly defined as being limited, or not limited, to output available for present competitive purposes. The problem is analogous to the question of whether self-used output belongs in the product market.¹⁴³

¹³⁵ The contention in *Ansett* that there were local markets in effect failed the LIFO test. There was therefore no need to consider the LOFI element.

¹³⁶ (1977) 1 ATPR 17,445.

¹³⁷ (1979) 2 ATPR 18,333.

¹³⁸ *Bundaberg Bakers Distributing Co* [1979] ATPR (Com) 15,554.

¹³⁹ *Bass Bakery Pty Ltd* (1975) 1 ATPR 8,805.

¹⁴⁰ *Darwin Cinemas Pty Ltd* [1977] ATPR (Com) 16,127, 16,131.

¹⁴¹ See B Donald and J Heydon, *Trade Practices Law*, (1978) Vol 1, 461-462; G Taperell, R Vermeesch, D Harland, *Trade Practices and Consumer Protection*, (2nd ed 1978) 384-386.

¹⁴² *United States v General Dynamics Corp* (1974) 415 US 485.

¹⁴³ *Product Market* 395-396.

B Foreign Production

From the point of view of economic theory, foreign exporters who sell goods or services in Australia should be counted as being within the geographic market. Doing so would of course greatly expand the market and greatly reduce the apparent market power of domestic producers. At the same time, it seems quite unrealistic to disregard the effect of government tariff and trade policies on import competition, especially given the readiness of Australian governments to increase tariff barriers whenever foreign competition looks like becoming effective. In practice, therefore, only that part of the foreign producers' output which reaches Australia is generally counted as part of the market.¹⁴⁴ The same is generally true in the United States, although the Court in *Alcoa*¹⁴⁵ has been criticised for so holding, on the ground that Alcoa may on further examination have been shown to have had only five percent of a vast international supply capable of responding to demand and supply shifts across national frontiers.¹⁴⁶

A recent departure from the normal Australian practice can be seen in the *Koppers* case,¹⁴⁷ in which the geographic market was said to be "quasi-international". What this rather ambiguous expression meant in terms of market shares was not made clear. As has been mentioned earlier, the Tribunal made no attempt to reconcile its definition with the provisions of s 4E, which provides that market "means a market in Australia"; indeed, s 4E was not referred to at all. The approach taken in *Koppers* would therefore appear to be at odds with the Australian statutory provisions, and even, for that matter, with the American one.¹⁴⁸

Similarly, exports from Australia that do not find their way onto the domestic market should theoretically be counted, their destinations being included within the geographic market. But exports are vulnerable to the economic policies and political posturings of foreign governments. And while exports do have an effect on the domestic price, that effect is indirect; we may thus be justified in not taking account of it if we are to regard the market as the arena for the interplay of *primary* demand and supply forces.

This does not mean that the capacity used for producing goods or services for export should be ignored. It can, and should, be taken into account at a later stage of the competition evaluation process as potential capacity which could be available for the domestic market if domestic prices were to rise sufficiently.

V CONCLUSIONS

Although the geographic dimension is just as important for correct market definition as the product dimension, it is only recently that it has begun to receive its share of attention from commentators.

¹⁴⁴ *Eg John Lysaght (Australia) Ltd* [1978] ATPR (Com) 17,304.

¹⁴⁵ (1945) 148 F 2d 416.

¹⁴⁶ L Sullivan, *Handbook of the Law of Antitrust* (St Paul 1977) 71.

¹⁴⁷ (1981) 3 ATPR 42,807, 42,828.

¹⁴⁸ In *United States v Tracinda Investment Corp* 1979 2 Trade Cases 79,138 the court described the market for the production of motion pictures as worldwide, but noted that the court could not look to worldwide effects for all purposes, since s 7 of the Clayton Act referred to any section of "the country". The court would take account only of the extent to which the worldwide nature of the industry affected competition in the United States.

A study of reported decisions from Australia, the United States and the Common Market shows strong similarities between the methods used in the three systems of competition law. The general practice is to examine a set of factors which include normal sales-purchase patterns, transport costs and legal barriers to entry, or such of those factors for which evidence is available. There is no scheme for consistent weighing of the various factors, nor is there any indication given of what should be done if evidence for one or more of the factors is lacking, or points in a different direction from that derived from other factors. This eclectic approach therefore requires the tribunal of fact to perform an act of judgment and, since this judgment is somewhat subjective, the results are not always consistent or predictable.

The orthodox approach has been refined somewhat in the recent writings of Professors Areeda and Turner. They elaborate the various factors in a variety of possible combinations, but their methods have impossible data requirements and contain, arguably, conceptual flaws. Their constructs appear in any case to be too elaborate and delicate for practical use, an impression which is reinforced by the authors' rather grand refusal to refer to any cases in which their principles have been applied or in which the available data were adequate to permit them to be applied. They do discuss a number of decisions by way of case studies, but those cases are treated in the standard eclectic way, without any attempt to apply to them the principles which the authors have so painstakingly developed.

Professors Elzinga and Hogarty criticise the eclectic approach because of its subjectiveness, its data requirements, because of the potentially misleading results produced by undue reliance on price data and because, in their view, the use of some conventionally-employed factors without the others can produce an incorrect result. The LIFO-LOFI approach which they propose instead of existing methods appears to have a number of advantages. It seems to have a self-contained conceptual rigour which is not quite so obvious in the older method; or at least, if it has any radical faults, other economists have not yet found them. Being less subjective, it is, from the economist's point of view, more readily "replicable" or repeatable. From the lawyer's point of view, this must make it more certain and predictable. Moreover, since it involves no violent departure from the methods already in use, it could be used in conjunction with them on a trial basis. If it is ultimately found to be satisfactory, the old eclectic approach could be abandoned altogether, with resulting increases in accuracy and savings in resources used for the market definition process. The Federal Court, the Tribunal and the Commission have nothing to lose and possibly a great deal to gain by putting the LIFO-LOFI approach into effect.