Modern Pricing Postulates
Microeconomics in a complex world
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Abstract
The standard economic model as presented in virtually all undergraduate economics textbooks represents competition as occurring between a large number of individually small suppliers offering identical products to a market patronised by fully informed consumers. This model does not reflect common experience, and is not supported by econometric studies. A model of consumer choice in a market where most consumers will decline the great majority of offers is presented here. It is shown to be consistent with econometric measurements of deadweight loss and with common consumer experience. Certain policy and theoretical issues are discussed.

Review
The Law of Supply and Demand, as taught on most microeconomics courses, postulates a simple, monotonic (usually depicted as linear) relationship between the quantity of a commodity taken by the market and the price. "When a commodity is cheaper, people buy more of it". At one time this was a reasonable description of consumer behaviour. In medieval Europe the price of bread was fixed, but the weight varied with the market conditions for grain (Braudel 1981: p. 139). A great superstructure of modern economic theory has been created on the basis of the law of supply and demand. This includes the concepts of economic efficiency (when the long term marginal cost of supply of a commodity equates to the price) and the proof that welfare is maximised by such efficiency. In contemporary (1995) Australia economic journalists and policy advocates call for labour market deregulation to cure unemployment: if, they say, wages are allowed to fall far enough, then everyone would have a job. When product markets are deregulated and competition is promoted then the result will, they say, be increased economic efficiency and maximal welfare.

The arguments that extend the law of supply and demand into a general theory of efficiency and welfare are broadly known as Competitive General Equilibrium Theory, and the ideal state that they describe is reached "in the long term". Lord Keynes is said to have remarked that "in the long term we are all dead" and modem systems theory backs him up: systems that reach equilibrium, or even a regular cyclical state, are, to all intents and purposes, dead.

The late twentieth century world is significantly different from the eighteenth century one, and the nineteenth and twentieth centuries have seen far more growth in per
capita incomes than the entire period of recorded history preceding them. Signs of growth and development in systems are generally inconsistent with the hypothesis of death, or even of equilibrium. Among those who have studied the nature and causes of growth in capitalist systems, there is a general consensus that a major factor in economic growth is innovation, the introduction of new methods of production and marketing, and of new types of product and new forms of industrial organisation.

Modem markets are supplied with a positive torrent of new products: in 1994 the packaged goods industries in the USA launched over sixteen thousand new lines: it would have been possible at any time during 1994 to have stocked a medium-sized US supermarket completely with products that had not been available a year earlier. Economists who have attempted to study modem markets using the tools of Competitive General Equilibrium Theory (CGE) have referred to the "excess" variety of products on offer and have debated whether all advertising is socially wasteful, or whether only some of it is. Economists who have looked at modem markets have come to the disturbing (to CGE theorists) conclusion that markets supplied with both horizontally and vertically differentiated products have an arbitrarily large number of equilibrium states (Beath & Katsoulacos 1991). The belief that a competitive market guarantees optimal economic outcomes underpins much of the more aggressive neoliberal rhetoric, but if a market can settle into any of a large number of possible states they can't all be optimal. Economists who have looked at economic growth explicitly, such as Grossman and Helpman (1992) have concluded that sustained growth in per capita incomes is impossible without the presence of both horizontal and vertical product differentiation.

Schumpeter (1942) noted that perfect competition was incompatible with innovation and he suggested that perfect competition precluded economic growth as well. This conclusion, labelled the "Schumpeterian Hypothesis" in microeconomics textbooks and then derisively rejected by them, has been proved by writers firmly anchored within the CGE tradition.

"Imperfect" competition is not only omnipresent but, as a necessary condition for economic growth, it is desirable. In a world of imperfect competition, innovation and economic growth, prices are no longer set exogenously by the law of supply and demand, since such exogeneity only occurs in the distant equilibrium state and not in the dynamic and turbulent present. This paper examines one aspect of the dynamics of price in a turbulent world.

Choice in the supermarket
Supermarket, mainly food and grocery, purchases account for about 7% of GNE in Australia. The market is relatively competitive on the supply side, with the largest operator (Woolworths) accounting for 30.5%, and marked by a large number of purchasers on the demand side. Tracking supermarket expenditure across the economic cycle suggests that some form of the law of supply and demand applies: gross

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1 Products are said to be horizontally differentiated when different people will make different selections: red and white wines are horizontally differentiated. Products are vertically differentiated when all consumers would prefer one of them if the prices were equal: when money is no object, most red wine drinkers prefer Grange Hermitage to cask red.
supermarket sales reflect GNP trends.

In detail, however, the simple relationships implied by the law of supply and demand break down entirely. The major supermarket chains recognise over 100,000 lines, distinct classes of items available for purchase, and a medium size suburban supermarket may carry 15,000 lines. Most purchasers will buy less than 100 lines at any visit, on practically all visits buying no more than one item from any one line. The probability of any one line being bought by any one purchaser is less than 0.6%; over 99.4% of lines are not bought by any one purchaser.

If a purchaser becomes more or less affluent they will not respond by buying more or less of the products that they selected on their previous visits, but they will drop, add, or replace lines. If the price of a given product changes, it may be added to or deleted from some purchasers' schedules, while many purchasers will continue to buy it or ignore it, in spite of the price change. A purchaser planning to buy one item from each of 100 lines from a store carrying 10,000 lines can complete the task in $10^{240}$ or so ways. Even if the purchaser has decided to buy one line from each of 100 categories, there are still over $10^{200}$ possible ways to fill the shopping trolley. This is a large number: even though it is infinitely smaller than the number of suppliers to a perfectly competitive market it is far larger than the best estimate of the number of elementary particles in the known universe.

The examination of a supermarket trolley can reveal one buyer's preferences, and it should be assumed that this represents an optimum use of that buyer's time and money, but the optimum must be a local one. There is no feasible way in which a buyer could establish that a given selection was the best possible; just that it was the best when each item is selected in isolation or after considering, at most, two or three others. Such a local optimum can still be globally sub-optimal, as, for example, when the buyer could have saved enough money by buying a marginally less desirable loaf of bread to be able to afford a substantially more attractive desert. Kauffman (1993) develops the problem of optimising N decisions where each decision may affect the utility derived from K others and applies it to the study of biological evolution. Nuts and bolts provide a mechanical analogy: if a designer decides to use a different type of bolt, that decision will be distinctly sub-optimal unless the holes, the nuts, and the assembly tools are all changed in step. Kauffman's approach is likely to prove valuable in the study of innovation and markets, but while numerous workers have been attracted to it, little has yet been published. Kauffman has given a somewhat more accessible account of his work and its relationship to economics recently (Kauffman 1995).

Kauffman describes the "fitness" defined as a function of the set of A possible values at each of the N loci as a "landscape" in N-dimensional space. His work adapts previous work on the physics of spin glasses, and can be adapted to subjects such as systems design and the economics of imperfect competition, where consumer utility replaces biological fitness as the objective function. On a "smooth" landscape the rule for finding the optimum point is simple: pick a locus (a line in a category at the supermarket, or a nucleic acid on a chromosome, or a value of a component design parameter), change its value to some alternative, and evaluate the result. If the fitness/performance/utility has been improved, keep the change and repeat the process.
at a different locus/category/component. After a maximum of AN trials, the fitness/performance/utility will be at its global maximum level.

Many systems are not that simple: an aircraft designer might be told to "increase passenger comfort* and to "lower the capital cost per seat". Wider seats increase the performance on the first indicator and reduce it on the second: there is no single ideal value of the seat width parameter. The designer of an aircraft-cabin has more than the width of the seats to worry about: there is the flammability, maintainability, manufacturing cost, installation cost, reconfiguration time. The average value of K, the number of factors that impact each other, is quite high. It is still much less than the total number of decisions needed to complete the design: the fabric used for the seats can be selected quite independently from the bolts that hold the tail plane on.

Kauffman demonstrates that all $NK$ "landscapes" are "rough" except for the trivial case where $K=0$. Cases where $0 > K > N$ are highly correlated, in Kauffman's terminology. On highly correlated landscapes progression to a local optimum is generally fairly rapid, but the move from one local optimum to a better one is a stochastic process which is likely to take an exponentially growing time per step. These statistics strongly suggest that most shopping trolleys passing through the checkout are at, or close to, a local optimum set of contents, but:

(a) in the short and medium term, no two shopping trolleys will have an identical set of contents and few, if any, will have a globally optimum selection;
(b) changing any one item will be a non-trivial decision, except for the case where the alternative is believed to be either superior or a perfect substitute at the same price, because in all other cases other items will have to be reselected to re-balance the planned expenditure budget.

Kauffman's results include an explanation of the "learning" or "experience" curve and the emergence of "dominant designs".

Selling in the supermarket
The conventional statement of the Law of Supply and Demand postulates a "representative consumer" who buys more of a product (increases $Q$) when the price ($P$) is lowered, and buys less when the price rises. In the supermarket we are faced with a distribution of consumers who may be assumed, with little loss of generality, to buy either one or zero, mainly zero, units of each product. Moreover, each consumer carries a real or conceptual schedule of preferred products (a "shopping list") into the supermarket and will tend to allow this schedule to determine the choice of products unless challenged by macroscopic factors, such as a significant price change. Other factors triggering a re-evaluation of a consumer's purchasing preferences might be exposure to some persuasive advertising, the strong recommendation of a friend or trusted acquaintance, or a bad experience with a product currently on the schedule.

A reduction in the price of a specific item will not, under these circumstances, change the amount of any single product that is already being bought by a given consumer, but it may result in the product in question being included on the shopping lists of more consumers. Most of the extra sales of the discounted product are likely to be at the expense of sales of similar products, and the suppliers of these products are likely to match any price cuts, in the short run at least, minimising the effect of the price cut on
the sales of the initiator of the discounting.

A general reduction in prices, or an increase in real per capita incomes, which amounts to much the same thing, will have little positive effect on most lines and a significant negative effect on many of them. Much of the increased purchasing power will go towards the addition to many shopping lists of products that had seldom, if ever, been bought before, while much will also be directed towards higher quality (ie, vertically differentiated) instances of previously bought products. Purchasers moving up-market do not, necessarily, increase the physical quantity that they buy; they may even buy less. In Australia, in the decade from 1985, there has been a marked increase in the gross expenditure on wine, while volumes have largely stabilised, as consumers moved from cask to bottled wine, and from lower priced bottled wine to premium grades.

Suppliers employ product managers and salespersons who negotiate wholesale and recommended retail prices, along with other contractual details, with supermarket buyers. The buyers are targeted with achieving rising revenues per square metre of floor space, and their greatest fear is of accidentally taking steps which might divert a significant number of shoppers to a rival chain. Observation of consumers shows that they don't visit two supermarkets if they can satisfy their needs in one of them, and if they are satisfied with the product selection and prices at a supermarket that has satisfied all their relevant requirements they are likely to return to that supermarket, or to a member of the same chain, the next time that they shop.

Supermarket buyers and store managers are quick to reduce the shelf space allocated to, or even to delete (ie, cease to stock), lines that can't earn a revenue appropriate to their space. Lines are likely to hold their position if either:

(1) their suppliers will offer rebates as needed to maintain their products' sales volumes when similar lines are offered at a discount, and such a discount may lead to a significant shift in market share;

or

(2) the line is a "totem" whose absence would cause a significant proportion of buyers to switch to an alternative supermarket chain.

Most lines are branded, either with a mark of their supplier or a house brand of the supermarket, and supplier brands are referred to as "strong" when they are totemic and/or when the rebates needed to preserve sales volume against discounting competitors are small or negligible. Many of Arnott Ltd's biscuit lines are strong brands in this sense; so are beverages such as Coke®, some paper products and many confectionery lines. As Pacific Dunlop Ltd discovered rather expensively over the years 1990–95, the Edgel® and Birds Eye® frozen food brands were not strong, and the rebates demanded by the major supermarket chains sapped the profitability of lines bearing these brands badly.

Brand advertising has the twin effects of strengthening the brand and encouraging prompt sales by pushing the advertised line onto an increased number of shopping lists. A statistical analysis of one successful advertising campaign suggested that the total value of the sales directly attributable to advertising was significantly less than the cost of the campaign (Legge 1994); the benefits as far as the supplier was concerned came from the fact that the short-term sales boost produced by the
advertising secured an increased display space, and the shelf visibility of the product in the periods following the advertising campaign produced enough sales to justify the initial advertising investment. In this case, as in many others, the mutual advertising and the shelf space commitments had been negotiated with the major supermarket chains before the advertising campaign commenced.

**Microeconomic implications**

Products sold in a supermarket may be strongly or weakly branded. In neither case will perfect competition apply: brand strength determines the division of market power between suppliers and retailers; it does not determine whether market power exists.

Whether the brands are weak or strong, the demand curve, and hence MR, will be strongly influenced by the binary nature of consumer choice. Individual consumers do not buy more or less of a product as the price changes; they buy it or they don't. Aggregate demand for a product is therefore determined by the statistics of consumer response to price. Consumers, confronted with a price increase for a preferred brand or for all the brands in a group of equally valuable products in a class, may simply stop buying the product if it is not an essential part of their life-style, or they may make the decision to experiment with a lower-priced, and presumptively lower quality, alternative. The observed demand for such a brand or category will be an integrated statistical distribution about some notional average reservation price.

**Fig. 1 Probabilistic demand curve**

Gauss's normal distribution is as good a place as any to start, but rather than distributing over the absolute level of the price it is convenient to use the ratio of the test price to the mean price, i.e., a log-normal distribution. Three such curves are shown in figure 1. Base 10 logarithms were used to generate figure 1, and so the curve labelled “σ=1.00” is the demand curve to be expected if 70% of potential customers' reservation prices lie in a range of 10% to 100% of the mean level, while the curve labelled “σ=0.01” shows a demand curve for the case where 70% of consumers are bunched in a band between 99% and 101% of the mean price. The curve labelled “σ=0.22” is the closest possible approximation to the straight line familiar to textbook authors that can be created with a log-normal formula. The figures used later in this paper are based on this curve, with 70% of buyers responding at prices between 82% and 122% of the mean reservation price.

The σ=1.00 curve is similar to, though not quite the same as, the right hyperbola that would describe the demand for a single, scarce commodity. In the eighteenth century and until the transport revolution of 1830 the majority of the population lived, quite literally, on the breadline: the reconstructed household budget of a German mason in 1800 shows 44% of the total household expenditure went on bread while over 70% of

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2 In 1830 the Rainhill trials demonstrated that the steam railway was practical.
the mason's total income was spent on food (Braudel 1981: p. 132). Under such circumstances a price change would relate quite directly to consumption, but such circumstances no longer obtain for the majority of the Australian population.

**Welfare considerations**

Economics textbooks seldom go very far before a diagram such as that in Figure 2 demonstrates the benefits of Competition and the evil consequences of Monopoly. Under competition the invisible hand of the Market sets prices equal to the long-run marginal cost of supply, \( P = MC \), while Monopolists set their prices such that their **marginal** cost is equal to their marginal revenue \( (MR = MC) \).

When the demand curve is drawn as a straight line, as in figure 2 and practically all the economics textbooks the current author has seen, the monopoly price is well over twice the price that Competition would have determined, and not only this, but there is a huge deadweight loss which equals the entire consumer **surplus**. Large bureaucracies have been set up in Australia and other countries to achieve Competitive Efficiency and eliminate these huge deadweight losses.

In America, but not, so far, in Australia, there have been at least two serious attempts to measure the real deadweight loss due to any deficiencies in Competition in the economy. Both Harberger (1954) and Gisser (1986) failed to find any conclusive statistical evidence for deadweight losses, but they demonstrated that the absolute magnitude of any such losses could not exceed 0.3% of GDP, "two steak dinners per year for the average American family." Gisser's final estimate was 0.114% of GNP.

The economically orthodox explanation for the Harberger and Gisser results is that businesses behave "as if" competition was perfect; that businesses who thought that they were competing for the business of specific customers or groups of customers by introducing superior products or marketing approaches were behaving as if their prices were exogenously determined. Suppliers who thought that they were competing against a quite small number of rivals in their industry were actually in a state of Competition, **sacrificing** vast potential profits in order to hold their prices down to the long-run marginal cost.

The supermarket analysis above offers the basis of a different explanation for the Harberger and Gisser results. In figure 3 the same construction as figure 2 is used, but with the demand curve based upon an integrated log-normal distribution. **Marginal** cost stands in for **marginal** cost in this diagram, since businesses survive from day to day.

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3 A capital \( C \) will be used for Competition in the economic textbook sense, with exogenously determined prices in a market with a continuum of suppliers. The normal style, competition, will be used for the colloquial meaning of a contest between a limited number of individuals or firms.
day or quarter to quarter, and the long run is of very little interest. The administered price is at \( MR = VC \), and the deadweight loss has shrunk to a small glitch.

Instead of the monopoly price being 150% greater than the Competitive price, it is only 5% or so higher. Instead of the monopolist's production restrictions depriving over 50% of the consumer population access to the product, the monopolist produces over 90% of the quantity that would have been delivered in a Competitive market working on the same cost schedule. As Schumpeter pointed out (1935) the monopolist may well have much lower variable costs than the multitude of small suppliers that would be needed to constitute a Competitive market, and the monopoly price may be much lower, and the quantity delivered much greater, than had obtained in previous, Competitive, circumstances: "add as many stage coaches as you like, you will never get a railroad by so doing."

The long run marginal cost must be estimated in order to estimate the deadweight loss. If this is taken to be equal to the average current cost at the monopolist's chosen supply level, then the published values of the ratio of net profit to sales can be used to estimate it. Table 1 sets out certain statistics relating to the largest 500 listed companies in Australia for the first half of the 1994–95 financial year (BRW 1995) and the "deadweight loss" implied by each of them.

If dividends, interest and taxes are ignored and the cash flow is taken to be the monopoly profit, the deadweight loss estimate comes in at 8.1% of revenue. Most people would agree that the country needs a government of some sort, and that fixed interest obligations should be met: the true deadweight loss must be much less than this. If the net profit is used as the basis of the calculation the estimate of the deadweight loss falls to 1.6%, but since this "loss" includes the payment of a return to shareholders this figure is also too high. On one reading the dividend is the true price of equity capital, and on this basis the retained earnings, at 2.5% of revenue, become the basis for the upper estimate for the deadweight loss of 0.53%.

Retained profits are not "pure" profit either: shareholders hold their shares in the expectation of growth as well as dividends, and retained profits are recorded in each company's accounts as part of shareholders' equity. Dividends, as a proportion of the market value of the shares upon which they were paid, represented an annual return
of under 4% for the period reported on. This is somewhat less than the after-tax return on Commonwealth bonds, and shareholders in listed companies must expect some risk premium on their investment returns: the estimate of deadweight loss at 0.54% by using retained profits as a surrogate for monopoly rent is clearly too high.

This argument has clearly demonstrated that every significant good and service market in Australia could be marked by monopolistic competition, with no shred of perfect competition left, and yet the deadweight loss would not exceed 0.5% of the economy, and would probably be significantly less than that.

The supermarket: a special case?
As mentioned above, goods sold in supermarkets represent about 7% of GNE. An examination of other traded goods industries shows similar, though perhaps not such extreme, proportions between product combinations offered and combinations bought. The motor industry produces an extraordinary variety of vehicles; even popular "mass produced" models such as the Holden Commodore or the Ford Falcon come in a dozen or so factory option sets compounded by another dozen colour and trim selections. The Falcon and Commodore models are themselves only one of several ranges offered by their manufacturers in Australia, and GM and Ford are only two of the forty-five manufacturers who managed to sell at least one car in Australia in 1994. The new car market is supplemented by a thriving market in secondhand cars, ranging from current model vehicles through bombs of various kinds to veteran and vintage automobiles.

If the car buyer is not faced with $10^{250}$ ways to spend their money, they certainly have many thousand options. As at the supermarket, most offers are rejected.

The Australian wine industry has been growing strongly in recent years, and the number of different wines on the market runs to the tens of thousands. A truly determined drinker might get through two bottles a day, but at the end of a year he would have only sampled less than 0.7% of the wines on offer in Australia and a new vintage would be in the stores. A drinker who observed the Medical Council's recommendations and stuck to two to three bottles per week would barely scratch the possibilities if they drank a differently labelled bottle every time they opened one.

Some 70% of the Australian economy is now classified as "services", and while some may be relatively undifferentiated, many are not. Professional and trade services are inherently differentiated by their provider: people cannot avoid being monopoly users of their own persona. Tourism is now a major industry: every resort is different, and people are quite vehement in their preference for one or for another. People restricted to four weeks annual holiday are certainly not going to be able to try more than a small selection of the holiday packages marketed in Australia.

Supermarkets may be an extreme case, but they are not a special one. The normal experience of Australian consumers is to be offered a wide range of products in every category from which they will select one and refuse the rest. The normal response of Australian consumers to price changes is not to buy more or less of the product concerned, but to add it to or delete it from their shopping list, if they respond at all.
Broader implications

To some extent the analysis above could be considered as offering considerable comfort to the "as-if" school of economists. An economy dominated by monopolistic competition can be remarkably efficient, in the sense of a small deadweight loss and prices at near to the "perfect market" levels. In detail the model is radically different from the undergraduate economics textbooks: marginal costs fall indefinitely; every consumer product is subject to market power, exerted by the supplier or by the retailer; the concepts of the "representative firm" and the "representative consumer" are rejected as misleading.

These detailed differences become significant when the microeconomic model is scaled up to become the source of guidance for public policy or macroeconomic management. If competition is normally monopolistic, then the laws against resale price maintenance serve mainly to transfer pricing power from manufacturers to retailers: there is no net consumer benefit produced by the transfer. Since manufacturers are often small and sometimes innovative, while Australia's major retailers are neither, the long-term effects may well be negative: phantom price reductions today are followed by less economic growth and the slower arrival of better products tomorrow.

The first half of the 1990s have been marked by a series of attempts to "fine tune" the economies of the USA and other countries by manipulating interest rates. The first attempt, in 1990–91, induced the most serious Australian recession since the 1930s. The second, the attempt to produce a "soft landing" in 1995–96, is in progress as this article is being written. A glance at figure 3 shows just how close the total cost curve is to the demand curve: a very small increase in fixed costs, or reduction in the relative level of demand, can eliminate the overlap altogether. If this happens there is no price at which the affected suppliers can trade while still covering their fixed costs.

The orthodox microeconomic model suggests that suppliers respond to falling demand by reducing their output, moving backwards down a falling marginal cost curve. In reality, firms whose cost curve has risen above their demand one may simply go out of business or they may attack their fixed costs, often slashing their marketing and development budgets. In the short term this will bring them back into profit, but over a two or three year period the lack of marketing and of new products will start to move their demand curve down significantly and the slashing starts again. The as-if school will be able to point to falling production in parallel with falling unit costs, but most business writers would say that firms who restore their profitability by cutting out marketing, development and customer service activities are simply cashing out stored value: capital assets are being sold and the returns treated as income.

The prompt or delayed failure of those businesses whose cost curve is too close to the demand curve will present the survivors with evidence of static or even slowly growing demand as the bereaved consumers look for new suppliers to adopt. With the surviving suppliers facing a more-or-less constant demand they will be under little pressure to reduce their prices; this could help to explain why interest rates had to be raised to ridiculously high levels in the early 1990s in order to establish price stability in Australia. This pattern of events is also consistent with the anecdotal evidence that aggressive marketers may do particularly well during a recession: their advertising is likely to be more effective when others cut back, and the reduced presence of their
weaker and more conservative competitors creates a pool of "orphan" consumers. Orphaned consumers are like new ones in that they have no established preference for any of the available products, and so are likely to respond more rapidly to advertising and to form relatively strong preferences for the first satisfactory product that they try.

Orthodox international trade theory predicts that a border tariff will add directly to domestic prices: this assumption is often used to justify reducing protection. Norman (1994) cites numerous surveys to show that only about 20% of a border tariff passes through to domestic prices in the short term, and about 40% over a longer period. Well documented cases exist where domestic prices raise after the removal of protection and the elimination of the local industry. Norman's result is much easier to explain if the domestic economy is monopolistically competitive with a probabilistic demand curve. In such an economy the state of local demand and of local producers' cost curves will be much more influential on price than "world" prices, and importers will either absorb the greater part of the tariff or abandon the market.

Conclusion
The concentration of industries and the proliferation of products is an inescapable feature of modern life, and has progressed to the point that it is difficult to represent the common experience of Australian consumers or businesses in terms of perfect competition. If the demand curves applicable to the majority of Australian consumer markets resembled those drawn in most common economics textbooks the proliferation of imperfect competition would be expected to lead to large deadweight losses and widespread inefficiencies.

In the USA, Harberger (1954) and Gisser (1986) attempted to measure the deadweight losses caused by industrial concentration and imperfect competition in the USA. Their conclusion, which has not been effectively refuted, was that the total deadweight loss caused to the US economy from industrial concentration and the resulting imperfect competition was somewhere between zero and trivial. The most common explanation offered for this result is that businesses are managed "as if" competition was perfect, that although many businesses have considerable market power they are constrained from using it by the fear of competitive entry.

If the assumption of a linear demand "curve" is dropped, the Harberger and Gisser results can be explained without assuming that America's (and Australia's) major corporations are managed by people who are either blind, stupid, or both. Universal monopolistic competition is consistent with small deadweight losses and relatively high economic efficiency. It is also consistent with Grossman and Helpman's (1992) conclusion that extensive product differentiation and monopolistic competition is a necessary condition for sustained growth in per capita incomes.

To the extent that the above analysis holds, it may be wondered whether the extensive trade practices bureaucracy and the ramifying "pro-competitive" regulations do not act as a greater drag on the Australian economy than the current degree of industry concentration and product proliferation, or any likely increase in either, is likely to be.
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Legge, John M. (1994), Confidential deposition to the Federal Court of Australia.

