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On the Need for a Rule to Prevent Anti-Competitive Limit Pricing

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II Abstract

Current predatory pricing laws are based on the Chicago School view that predatory pricing strategies will be rarely attempted. The rules therefore make it almost impossible to prove that predation has occurred and move away from a focus on whether the firm had anti-competitive intent. In particular, the requirement that predation must be below cost should be reconsidered, especially in light of models of limit pricing which show how incumbent firms can take advantage of imperfect information to mislead or threaten entrants. Limit pricing can be especially harmful in multi-market and test-market contexts. Edlin suggests a price rule which would help to ensure firms cannot protect high prices by threatening price cuts upon entry: Incumbent firms are prevented from lowering prices in response to an entrant that prices substantially lower than the incumbent's price. This would result in a loss of monopoly profits, meaning incentives to invest in innovation may be reduced. However, this is likely outweighed by the benefits to consumers and competitors of this rule, which encourages lower monopoly pricing, and can make entry easier to justify. To be implemented, aspects of this rule would need to be assessed, including the price needed to trigger the rule on entry, the length of time the entrant can benefit from the rule, and whether an incumbent is ever justified in ignoring the rule.

Keywords: "Predatory Pricing", "Limit Pricing", "Anti-Competitive purposes", "Monopolies"

III Introduction

There exists a wide range of views on the extent to which price drops can be used for anticompetitive purposes. Current anti-competitive laws in New Zealand and the United States have evolved based on theories that firms will rarely choose the use price drops anticompetitively. A high bar has thus developed to proving predation, in the form of requiring below-cost pricing to prove predation. This paper will argue that the below-cost standard is overcautious. It will set out models which illustrate the harm that above-cost price drops can cause, in the context of preventing entry (known as limit pricing). It will then argue for the addition of a rule preventing anti-competitive post-entry price drops, as advocated by Edlin. This rule would level the power imbalances which are created due to the compounding advantages that an incumbent can make use of to 'bully' potential entrants. More practical issues of implementing Edlin's rule are then discussed. Edlin's rule would not be without its critics, but this paper argues any losses for monopolists are entirely justified given the current predation framework's inadequacies.

IV The Current (Flawed) Below Cost Scheme

A What is Predatory Pricing?

The decision to drop prices is one of the most important that a firm can make. It is a key sign of a functioning competitive market – firms respond to the competitive pressure of their rivals by reducing their prices to increase their market share, while consumers benefit from lower prices for the same quality goods. Regulators must therefore be careful when attempting to prohibit a price drop – they do not want to inadvertently encourage firms to set higher prices for consumers. However, there is one obvious reason why a regulator should prohibit a price drop: where a firm uses its market power in order to remove a competitor from the market. Price drops are a useful tool for a firm with market power looking to bully rivals out of the market so that it can extract as much profit as possible from consumers. Much like a schoolyard bully, such firms have managed to get the authorities in their corner: they are too often given the benefit of the doubt for their poor behaviour due to fears of punishing innocent behaviour.

Predatory pricing is usually analysed in two distinct phases. Firstly is the predation phase. This occurs when price drops are aimed at causing a competitor to exit the market by making competing unprofitable.¹ Firms that predate are then able to take advantage of the new lack of competition by raising prices, to the detriment of consumers.² This is known as the 'recoupment phase' because firms can recoup the losses made during predation (and then continue making higher profits).³

B Current Law

In the United States, New Zealand, and elsewhere, there is a high bar to proving that a firm is predating: amongst other requirements, it must be proven that a firm is pricing below some measure of its costs (typically variable costs). This is a stringent requirement, because a firm can be pricing above its costs and still have a harmful anti-competitive intent: Any price which is below the firm's profit-maximising level means that the firm is sacrificing profit for some other objective, which could potentially be to remove competitors from the market. There is nothing inherently meaningful about whether such pricing is above or below costs. However the court justifies requiring prices to be below cost on the basis that it provides stronger evidence of anti-competitive intent.

In the United States, there is a further requirement to prove predation that the predator must be able to recoup losses.⁴ A similar requirement exists in New Zealand law.⁵ This requirement is somewhat problematic: predatory pricing is a long-term strategy. Even if there seems no clear way to recoup losses immediately, the reduction in competition has the potential for far-reaching consequences for the market which would likely be beneficial to the incumbent.

This "below cost" rule has not always been a requirement. In *Utah Pie*, an important United States case on predation, the court felt that pricing below cost was merely a useful indication

¹ OECD "Predatory Pricing" (1989) <https://www.oecd.org/competition/abuse/2375661.pdf> at 5.

² OECD above n 1 at 75.

³ OECD above n 1 at 75.

⁴ Brooke Group ltd. V. Brown & Williamson Tobacco corp. 509 U.S. 209 (1993) at 222.

⁵ Commerce Commission New Zealand "Predatory pricing or competitive price matching - Case study"

^{(2018) &}lt;a href="https://comcom.govt.nz/__data/assets/pdf_file/0031/116995/Predatory-pricing-or-competitive-price-matching-Case-study-July-2018.pdf">https://comcom.govt.nz/__data/assets/pdf_file/0031/116995/Predatory-pricing-or-competitive-price-matching-Case-study-July-2018.pdf> at 2.

that a firm intended to act anti-competitively.⁶ This view has now fallen out of favour, with some arguing that this "early foray" was not sufficiently nuanced.

C Brooke Group

The below-cost pricing rule was solidified in *Brooke Group*, where ideas from economists Philip Areeda and Donald Turner were implemented.⁷ Areeda and Turner base their thinking on the belief that the strategy of predatory pricing is a "highly unlikely" strategy, as advocated by the influential Chicago School theories. ⁸ They therefore advocate for a rule which takes "extreme care".⁹ not to discourage legitimate competitive price drops which are beneficial to consumers. Clear evidence of predation was seen to be necessary, in the form of prices below either variable costs or marginal costs.¹⁰

The actual incidence of predatory pricing is difficult to determine. There have been few successful predatory pricing cases, but this must be at least partly attributable to the courts' increasingly extreme caution in their approaches. The cautious approach creates an unfairly strong impression that firms will never practice limit pricing.

The court in *Brooke Group* not only adopts the below-cost requirement but appears to regard it as a definitional requirement of anti-competitive pricing behaviour. It cites *Atlantic Richfield v USA Petroleum*'s reasoning for requiring below-cost prices in the predation test: "low prices benefit consumers regardless of how those prices are set, and so long as they are above predatory levels, they do not threaten competition".¹¹ If a firm is not pricing below cost, the judges in *Brooke Group* believe it must have honourable intentions. This represents an overreliance on the Areeda-Turner rule, which is a heuristic, useful as a tool but not designed to delineate between harmful and non-harmful price drops. In siding with the would-be predators, regulators are in danger of forgetting that the (valid) excuse for not stepping in is

⁶ Utah Pie Co. v. Continental Baking Co. 386 U.S. 685 (1967) at 702

⁷ *Brooke Group* above n 4 at 222.

⁸ Phillip Areeda and Donald Turner "Predatory Pricing and Related Practices under Section 2 of the Sherman act" (1975) 88 Harv. L. Rev. at 699.

⁹ Areeda and Turner "Predatory Pricing and Related Practices under Section 2 of the Sherman act" above n 8 at 699.

¹⁰ Areeda and Turner "Predatory Pricing and Related Practices under Section 2 of the Sherman act" above n 8 at 733.

¹¹ Atlantic Richfield v USA Petroleum 495 U.S. 328 (1990) at 340.

not evidence that firms are behaving themselves: It is easy to mistake the map for the territory, and forget that they choose to allow all above-cost price drops not because they are never harmful, but because it is too difficult to prove anti-competitive intent.

Even where firms have priced below costs, New Zealand law has been reluctant to find they have predated. In *CarterHoltHarvey*, it was ultimately held that a firm was justified in dropping prices if it was meeting the prices of an entrant.¹² This puts entrants in a difficult position: incumbents likely have little need to price below entrants because existing relationships with customers mean its products will usually be preferred.¹³

Predatory pricing is difficult to disentangle from below-cost pricing because there can be legitimate reasons for a firm to price below its costs in the short run: examples of reasons include attempting to create a network effect, promotional pricing to build demand for a new product, or subsidising losses through higher sales of a complementary good.¹⁴

D Empowering the Bullies?

The current below-cost scheme puts the onus of proof on the prosecutor. They must show clear and irrefutable evidence that a firm's strategy is illogical in the short-run to prove that the firm must be pursuing a long-run strategy of eliminating rivals. It makes little sense to put such an onus on the prosecutor when there is an obvious information asymmetry: The firm itself knows the exact reasons why it made a pricing decision. It knows if it was "abusing its market power for an anti-competitive purpose". There is in a sense a mens rea element to this offence: if the law wants to discourage firms from acting for an anti-competitive purpose, it should place less focus on the result of the price drop and more focus on the reason the firm made the price drop. But prosecutors are tasked with reconstructing this qualitative and subjective decision based only on quantitative information. Were an onus instead placed on the firm, it would be easy for them to prove their innocent intent – they must have had some legitimate reason for reducing prices, and could share their records to show what such a legitimate reason was.

¹² Commerce Commission New Zealand above n 5.

¹³ Aaron Edlin "Stopping Above-Cost Predatory Pricing", Yale L.J. 111(4) (2002) 941 at 972

¹⁴ Paul Scott "Is a Dominant Firm's Below Cost Pricing Always a Breach of Section 36 of the Commerce Act?" (2004) 21 NZULR 106 at 122.

The end goal of any rule should be to reduce the number of firms that lower prices with anticompetitive intent (regardless of the success of this strategy). The *Utah Pie* rule is therefore right to focus on intent, but falls down due to practicality – with no way to actually find intent, judges are simply reliant on intuition, leaving firms eternally uncertain if a price drop is legal. The *Brook Group* below-cost approach attempts to fix this with a bright-line test. It fails however, for a different reason: getting the balance completely wrong between encouraging entry and rewarding investment.

E Competing forces: Incentivizing investment vs maintaining competition

In New Zealand, anticompetitive laws are designed with the aim of "promoting competition for the long-term benefit of consumers.¹⁵ This is a common approach which can be used to analyse the validity of the below-cost pricing prohibition. Any pricing decision which aims to reduce the amount of competition in the market is harmful to consumers because there will be less long-term downward pressure on prices. However, the mere existence of monopolies or oligopolies are not inherently harmful for consumers. Such firms argue that without the existence of supernormal profits, there would be no incentive for them to make large investments, or engage in research and development to become more efficient. Some products might never be available to consumers unless delivered by a monopoly, and some could be cheaper due to greater efficiency, even when delivered by a single firm. Regulators, it is therefore argued, shouldn't punish firms that have reduced their prices because they are vastly more efficient than their rivals, even if the lower prices would remove competition.

Any approach to predation must make a choice about what is the correct balance between incentivising investment and ensuring there is sufficient competition. The current approach is firmly in favour of encouraging investment, with little focus on supporting would-be competitors.

The benefits of competition are easy to under-value: they in fact extend far beyond just encouraging lower prices. Competition has further intangible benefits which consumers would want to be protected. One example is the freedom that comes with having a choice. When there is more than one firm, consumers can express dissatisfaction with a firm by buying only from its competitor.

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¹⁵ Commerce Act 1986, s 1A.

Competition also encourages firms to differentiate their products, meaning they are more suitable for some competitors. Furthermore, intense competition between firms is perhaps the best driver of innovation – of course, innovation is also easier when firms aren't just working on their own and there is a need to constantly improve efficiency or they will be unable to compete on price and may have to leave the market. By contrast, monopolies encourage a firm to rest on its laurels once it has made its investment. Without immediate pressure, innovation moves from a necessity to a 'good-to-have'. Some aspects of competition can apply even without a second firm entering the market. Potential competition (where a firm is ready to enter the market) can restrict the choices available to the incumbent, who must act so as to be ready for entry at any time.

The current below-cost pricing rule exists due to fear. Regulators are too afraid that they will accidentally punish "good monopolies", which are just responding to entry as an efficient competitor should. They are also too afraid to label a firm's behaviour as harmful, needing first to see irrefutable proof that a competitor has been unfairly kicked out of the market. Fear is the key tool of the bully, who uses it not only to manipulate the authorities, but to punish their victims invisibly. This paper argues it is possible to cast the net wider, catching more anti-competitive behaviour without more "false positives".

V Examples of harmful above-cost pricing

A Limit Pricing: Invisible Bullying Behaviour

The below-cost scheme allows incumbent firms' bullying of entrants to pass under the radar. Under current law, a firm can engage in harmful price drops which have the purpose of removing competition so long as it does not price below its costs.¹⁶ This might be possible because the "predating" firm has lower costs than a rival. Some may argue that this is less problematic because such a firm must be more efficient and thus able to serve the entire market on its own.

However, there is a further aim of price drops capable of deterring entry by even equally efficient firms, which current laws make no attempt to address. That is firms acting in misleading or aggressive ways in the present in order to discourage future entry by even equally efficient firms. Such behaviour, known as limit pricing, can be harder to identify

¹⁶ Commerce Commission New Zealand above n 5.

because the "victim" can be less obvious. Nevertheless, it is unambiguously harmful to consumers and should therefore be addressed.

In a perfect information model, limit pricing is not a valid strategy. Upon entry, the incumbent's best strategy is to accommodate entry, pricing at the profit-maximising level, and this cannot be changed by pre-entry price drops. This means a potential entrant can safely ignore any threats and enter the market

In reality, however, entrants do not have perfect information about their competitor. Limit pricing can take advantage of the information asymmetry that will usually exist between potential entrants and incumbents. The incumbent uses its pricing to suggest to potential entrants that entry will be fiercely contested, even if that is not actually the case. The entrant does not know if the threats are valid, so must take them seriously.

B Pre-Entry Signalling

An incumbent firm may still decide to engage in limit pricing in order to send a signal that its costs are lower than they in fact are. Milgrom and Roberts develop a model of limit pricing based on the idea of a signalling game.¹⁷ When the incumbent sees that a potential entrant is considering entering the market, it may choose to proactively lower its prices before entry. The aim is to signal that it has low costs and will be able to compete fiercely if entry is to occur. This is further expanded on in the specific case of test market limit pricing.

C Test Market limit pricing

A potential entrant will typically be at a disadvantage because they lack important knowledge about the market. This can include information on the level of demand for the good, the costs of an incumbent, and even the costs that the entrant itself is likely to face. Such an entrant may attempt to test these factors by first entering a smaller 'test market', and then committing fully to entry if conditions appear favourable.¹⁸ An incumbent firm thus has an incentive to disrupt the signals that the potential entrant is receiving in the initial test, for a much bigger long-term payoff in reducing competition in the main market.¹⁹

¹⁷ Paul Milgram and John Roberts "Limit Pricing and Entry under incomplete information" Econometrica (1982) 50 (2) 443 at 446.

¹⁸ David Scharfstein "A Policy to Prevent rational test-market predation", The RAND Journal of Economics, 15 (2) (1984) 229 at 230.

¹⁹ Scharftstein above n 18 at 230.

When a firm engages in test marketing, the incumbent will reduce its prices. Of course, this in itself is a natural competitive response to a new entrant, and is not harmful. But the incumbent may lower its prices below the appropriate competitive response. This has two proses: firstly, it makes it harder to gain accurate insight into true market dynamics, and the level of demand. Secondly, it allows a firm to pretend that its costs are lower than they really are. The entrant will then have a skewed view of what might occur if it commits to entering the main market. Such an entry is less palatable because the perceived competitive price drop is lower than in reality. This may therefore cause the potential entrant to choose not to enter the market altogether. This is harmful to consumers, especially because the potential entrant may have been just as efficient, or even more efficient than the incumbent.

1 Signalling Games

Test market limit pricing is particularly pernicious because it can work even when the potential entrant suspects it may be occurring. Consider two incumbent firms, one with high costs and one with low costs. They are playing a signalling game with the potential entrant: both the high cost firm and the low cost firm want to signal to the entrant that they have low costs so that entry does not occur. The low cost firm can simply signal this by pricing at the short-run profit-maximising response to the test market entry. This is not predation, but it lets the potential entrant know that entry will challenging unless it too has low costs.

The high cost firm can also send a signal it has low costs by pricing at the same level that a low cost firm would. This is below the higher cost firm's profit-maximising response, meaning it is sacrificing profit to send the signal. However, it can result in greater long-run profits, and so long as it is above the firm's costs, this would be legal.

This results in a pooling equilibrium – the incumbent would act the same way if it had low costs as if it had high costs and was limit pricing. ²⁰ The entrant is unable to know whether the incumbent is low-cost or high-cost. It is therefore difficult to call the high-cost firm's bluff, because if the entrant enters in full (likely at some cost), it will be punished if the incumbent is in fact low-cost. ²¹

²⁰ Scharftstein above n 18 at 230.

²¹ Scharftstein above n 18 at 230.

D Multi-market limit pricing

Another way that an incumbent firm can discourage entry is by developing a reputation as an "aggressive" firm.²² Firms which are competing in multiple markets can make use of this strategy. One of these markets becomes the focus. When a firm makes the decision to respond aggressively to entry. Typically, the best response to entry into the market by a firm of similar efficiency is to accommodate the entry, because they cannot be forced out. However, when using this strategy, the incumbent firm will price below its profit-maximising level of output. The aim is for an extended battle with the entrant that is painful to both. There is no 'winner' in this market: the incumbent firm will subsidise the sacrificed profit with the gains in other markets. The aggressive response to entry will be noted by potential entrants to other markets that the firm is present in.²³ Of course, when entry does occur in any of the other markets, the incumbent's best response is to accommodate entry, meaning that aggression is a non-credible threat. But the potential entrant may be led to believe that the incumbent is prepared to act irrationally, and the aggressive response also signals that it has deep pockets to fund such behaviour. The aggressive response in one market is therefore able to have a chilling effect on competition in all markets by deterring entrants from choosing to enter even when it would be rational to do so.

Unlike in the test-market case, here firms are not being misleading about their own efficiency. They are instead playing a game of 'chicken', by sabotaging the profits of themselves and their opponents. The larger firm should always win this game, because they are better equipped financially to deal with lower profits. It is therefore an equally valid example of using market power for anti-competitive purposes.

E Compounding Advantages.

Even without limit pricing, incumbent firms have advantages over even firms which are on paper equally efficient. Knowledge of the market and economies of scale mean that they will be able to produce at a lower cost than the entrant when they are starting out. Entrants will also usually have barriers to entry such as start-up costs, which make them less profitable if they cannot be certain of long-run stability. While some of these advantages can mean gains from greater efficiency are passed on to the consumer, they can just as often be used to take advantage of entrants and consumers alike. These advantages can make it even easier for powerful incumbents to use limit pricing to increase their dominance.

²² Milgram and Roberts above n 17 at 302.

²³ Milgram and Roberts above n 17 at 304.

Economic theory suggests that if the market concentration is high to begin with, it will only get more concentrated over time.²⁴ This is due in part to the compounding of advantages: greater efficiency allows firms to expand, which creates economies of scale and further efficiencies which allow further expansion. The same principle applies to limit pricing. When firms are larger, it is not only easier for them to absorb the short term costs of limit pricing, but the potential benefits of the practice are much greater. This is especially clear in the multimarket model. The cost of signalling aggression is essentially fixed, as it only needs to occur in a single market. The benefits are felt in every other market the firm participates in - so a firm competing in 30 markets would see three times as many benefits of a firm competing in 10 markets.

By allowing limit pricing, regulators are giving additional support to those who already have the cards stacked in their favour. Furthermore, allowing limit pricing is most beneficial to the largest, most powerful firms who are in least need of further help. Given the fact that such advantages are stacked in favour of the incumbent, a truly fair system should attempt to counterbalance even if this means disadvantaging the incumbent firm.

VI Edlin's Price Rule

One of the hallmarks of a bully is that they change their behaviour based on the circumstances. When an incumbent is confronted with entry, they take advantage of judicial leniency to fiercely compete with low prices. But when these price drops succeed in deterring entry, suddenly the incumbent is obsessed with extracting as much profit as possible from consumers, exposing the flaw in regulators' reluctance to ever punish lower prices. Furthermore, past a certain point, the bullying incumbent never even needs to engage in harmful behaviour. The mere threat of using their considerable forces becomes enough to deter even equally efficient potential entrants from attempting to compete. Edlin suggests a price rule which would combat the poor behaviour of incumbent firms by making it necessary for them to behave as though they had constant competitive scrutiny. This makes them less likely to attempt anti-competitive strategies, and creates a level playing field for incumbents.

²⁴ Gautam Gowrisankaran and Thomas J. Holmes "Mergers and the Evolution of Industry Concentration: Results from the Dominant-Firm Model" The RAND Journal of Economics (2004) 35(3) 561 at 579.

Edlin's rule works by preventing certain reactive price drops by incumbents. Under the rule, if an entrant firm sets it prices substantially below the incumbent's, the incumbent cannot lower its prices (ceteris paribus) for a 12-18 months.²⁵ For analytical purposes, it is suggested that "substantially below" means 20% below, although its exact meaning will be discussed below. Edlin's rule doesn't explicitly ban limit pricing - in fact, it encourages incumbents to set lower prices. It instead focuses on a firm's ability to recoup losses made during limit pricing. Firms are thus required to price at a consistent and sustainable level.²⁶ This will lead to incumbent firms choosing to avoid pricing strategies which aim to mislead, as there is less value in a high cost firm signalling low costs. Potential entrants will benefit from this rule as an incumbent's pricing behaviour is more predictable. Regardless of whether potential entrants in fact choose to enter, consumers are better off as a result of lower prices which last for the long-run, rather than disappearing as soon as entry is deterred.²⁷

A Application: Pre-Entry Price Drops

Pre-Entry Price drops aimed at signalling low costs are less useful under Edlin's price rule: The incumbent. Therefore, signalling low costs is less valuable because the threat of lowering prices is only available if prices are already low. The incumbent will thus be less likely to use a pre-entry price drop to mislead a potential entrant. Even if the strategy is used, the incumbent is prevented from taking full advantage, as it must continually maintain prices close to the potential entrant's costs.

B Application: Test Markets

Although Edlin's rule would not always prevent firms from limit pricing in response to test market entry, it provides other opportunities for entrants to gain information about the market

Edlin's rule turns the tables on incumbents by requiring them to focus on the potential entrant's costs, which they can never be certain about. If an incumbent sets prices more than 20% above a potential entrant's cost, the entrant can enter and invoke Edlin's price rule.

²⁵ Edlin above n 13 at 966.

²⁶ Edlin above n 13 at 973.

²⁷ Edlin Above n 13 at 973.

Incumbents will therefore be forced to lower prices to make it harder for potential entrants to do so. In doing so, they must compromise between maintaining current profit levels and protecting against the risk of entry, which would result in a significant loss of revenue until Edlin's rule expires.

Consumers are unambiguous winners here, as prices will be lowered, and will remain consistently low as there is a continuous need to protect against entry. Potential entrants will also be better off. This is because the incumbent will not always be able to ensure their prices are less than 20% above the potential entrant's costs. When prices are sufficiently high, potential entrants have a guarantee about what will happen if they make a substantial entry into the market: the incumbent will not be able to lower prices, meaning the entrant does not need to worry about the incumbent's costs in the short term. Edlin's rule will eventually expire, but because the entrant has already justified the costs of entry, it has no need to fear the incumbent's price drops. A lower cost incumbent will be able to re-establish its dominance through price competition, and an equally efficient incumbent will likely choose to accommodate the entrant.

Edlin's price rule also enables potential entrants to take a different approach to test markets. Entrants could choose to make a substantial entry into a test market, at or even below cost. This ensures that the incumbent is unable to disrupt the entrant's attempts to gain knowledge about the market, such as demand and its own cost structure. It would also be an opportunity to make improvements to its production process to further increase efficiency. Once this information has been gather without interference, the entrant can be more confident in its decision to enter the market fully. Of course, the one piece of information that this will not help with is determining the incumbent's costs, and the incumbent cannot signal anything. Fortunately, this is now less of a problem, because the incumbent has to worry as much about the entrant's costs, which it also cannot know. There is thus greater balance in the market, as the entrant and the incumbent both have to bear the risk of miscalculating their opponent's costs.

C Application: Multi-Market limit pricing

Multi-market limit pricing would be much less useful if Edlin's price rule were to apply. The strategy relies on a credible threat of harsh price drops. Aggressive response in one market may thus allow huge above-cost prices in other markets. However, the threat cannot be

credible if an entrant prices sufficiently below the incumbent. The incumbent is thus forced to defend each market individually with prices close to the entrant's costs. Consumers benefit from these lower prices. The constant need to defend each market means that there is no reason to signal aggression, so the strategy would not be used. The ability of Edlin's price rule to require incumbents to put in the work for every market is particularly important – left unchecked, multi-market limit pricing can create enormous walled empires which the incumbent needs to do little to defend. This can lead to power continuing to concentrate as the firm makes use of its reputation to bully more and more firms out of new markets.

The Multi-Market model shows how firms with market power can find it easier to accumulate even more power: when a firm can create benefits in many markets with its actions in just one, it makes sense to control as many markets as possible. The more markets a firm is in, the more profitable it is to develop an aggressive reputation, and the easier it is to subsidise actions which achieve this goal.

D A meaningful solution

The major problem of limit pricing is that the threats of price drops remain effective permanently, and against all competitors, but have no continuing cost to the incumbent, who can charge high prices in the meantime. This is effectively addressed by Edlin's rule, because the ability to drop prices relies on having prices which were already low. Under Edlin's rule, incumbents must maintain lower prices permanently, a clear benefit to consumers. This is an example of competitive forces working even without any firm entering the market – the potential of entry is enough.

It is important to note that in all of the above examples it is possible that the potential entrant will still be deterred from entering. Edlin's price rule simply means that incumbents have to work harder at deterrence, because scare tactics are less effective.²⁸ This means that entrants will be accommodated more often, benefitting consumers, and where potential entrants are deterred, they continue to exert a competitive influence on the incumbent firm, meaning consumers get to enjoy the benefit of lower prices.

It is also important to note that only firms that are as efficient or almost as efficient as the incumbent are likely to be able to take advantage of Edlin's price rule. The rule gives no special benefit to entering if you are not able to price 20% below the current price, which is likely to be challenging in a competitive market.

VII Critiques of Edlin's Price Rule

A Elhauge's critiques

Elhauge is critical of a number of cost rules which act as a price floor, including Edlin's price rule. This paper argues that Edlin's price rule is desirable despite these critiques. This is because Elhauge's critiques are mainly applicable to specific special cases, and in some cases don't make apply to the specific context of Edlin's rule.

1 Incumbent price increase?

Elhauge repeatedly claims that cost rules which act as a price floor can incentivise an incumbent firm to increase its prices if the rules are engaged.²⁹ While this claim may be valid for some price rules, Edlin's rule does not suffer from this flaw. The claim is based on the assumption that the price floor applies until such time as the incumbent's market share has fallen below a certain level.³⁰ Were this true, a firm could attempt to hasten its own fall in market share by raising prices. This would then "short-circuit" the price floor, allowing the incumbent to again compete on prices and drive out the entrant. However, Edlin's rule takes a different approach, engaging the price floor for a set length of time (he suggests 12-18 months. This avoids the potential flaw present in other price rules.

2 Siding with entrants

Elhauge also makes the argument that price rules like Edlin's will unfairly advantage entrants that are as efficient or more efficient than the incumbent. ³¹ This is to suggest that the real bullies could in fact be the entrants, not the incumbent. In such cases, it is true that Edlin's rule is unfairly supportive of the entrants. However, these cases are unlikely to be frequent: an incumbent likely achieved their position by being an efficient producer, and experience in the market can lead to further efficiencies.³² Therefore, even an entrant that is more efficient on paper might struggle to produce at as low a cost as an incumbent can. Furthermore, even if the

²⁹ Einer Elhauge "Why Above-Cost Price Cuts to Drive Out Entrants Are Not Predatory – And the Implications for Determining Market Power" Yale L.J. 112(4) 681 at 794.

³⁰ Elhauge above n 29 at 756.

³¹ Elhauge above n 29 at 774.

³² Edlin above n 13 at 963.

incumbent is beaten on price, some consumers may continue to purchase from the incumbent, due to other advantages such as a strong brand, or network effects.³³ Elhauge claims that Edlin's price rule could never cause efficient firms to enter when they would not have previously.³⁴ However, this is not only true in the case of perfect information. Where uncertainty might have preventing entry by an equally efficient firm, this rule can, on occasion, give complete knowledge of what will happen when a firm enters. Furthermore, even if this rule does not make it mathematically easier for firms to enter the market, it does make it psychologically easier, as there is no possibility of an unexpected surprise.

Elhauge also notes that equally and more efficient firms are disincentivised from lowering their prices below the 20% below the incumbent's price. ³⁵ Such a rule is therefore cheating consumers out of their potential lower prices. This is entirely correct. While in general this rule promotes lower prices, on the rare occasion that a much more efficient firm enters, prices could have been even lower without the rule, due to both firms competing on price. This is an acceptable shortfall of the rule because such a situation is likely to be rare, and even when it does occur, this advantage will only be enjoyed by the entrant for a short while before the incumbent can again compete, driving prices back down. The rule is extremely punishing to the incumbent if it can be made use of by an entrant. This large potential for punishment means incumbents are likely to take extreme caution by proactively lowering their prices to a level they can feel confident could never be undercut.

Even in the case where an entrant uses Edlin's rule to bully out an incumbent, they will quickly find the tables being turned on them - as the new incumbent they themselves will quickly be susceptible to the rule and may soon have reason to fear their victim's revenge.

B The Monopolist's critique

Monopolists will argue that Edlin's price rule is harmful as it discourages innovation and investment by reducing potential profits from establishing a monopoly. Elhauge argues that innovation is a more important goal than low prices, claiming that innovation is better than

³³ Edlin above n 13 at 963.

³⁴ Elhauge above n 29 at 773

³⁵ Elhauge above n 29 at 774.

consumer welfare in creating long-term benefits. ³⁶ However, The extent to which Edlin's price rule actually discourages innovation is likely to be limited. Consider for example a firm which is able to price 20% above a potential entrant's costs. The incumbent is unable to increase prices any further without the entrant entering the market and undercutting it. This may mean that it loses out on some monopoly profits. However, any further innovations will still be profitable, because they will reduce costs. Ceteris paribus, innovations which reduce costs will always decrease the profit maximising price. Edlin's price rule does nothing to discourage a from pricing less than 20% above a potential competitor, so the firm can decrease prices to the benefit of both consumers and the incumbent. In the worst case scenario, the innovation means the profit-maximising price is still more than 20% above a competitor's costs, meaning the price remains unchanged, but the incumbent benefits from lower costs.

The marginal decision to invest is therefore always produces benefits. When an incumbent's profit-maximising price is less than 20% above the nearest competitor's costs, the benefits are the same as in an unregulated market. When the profit-maximising price is more than 20% above the nearest competitor's costs, a firm's benefits are more limited. Edlin's price rule thus encourages investment which results in a significant efficiency advantage. If an investment is sufficiently large as to ensure the firm can profitably price low, the firm will reap its full benefits.

VIII Issues of Implementation

A Key elements of Edlin's rule

3 Which price must the entrant beat?

Elhauge makes the point that if the price rule applies to the incumbent's price immediately prior to entry, they could simply charge higher prices until just before entry seemed likely, then drop prices prior to entry, ensuring the rule is never applied. If this was to be allowed, firms would only be further encouraged to engage in the behaviour the rule was designed to prevent.

A solution could be to only require the entrant beat the highest price the incumbent set within a given timeframe. Under this approach, a potential entrant should be able to see the

³⁶ Elhauge above n 29 at 781.

incumbent has raised prices, prepare for entry and enter the market without having to deal with lower prices which are in effect a response to entry, even if it has not occurred yet.

However, the timeframe must not be so long that an entrant can undercut a price which was responding to market conditions which no longer exist. For example, an incumbent may need to price seasonally. An entrant should not be able to enter in the late spring in reliance on the incumbent's necessarily higher winter prices.

It should be possible to set an exact time, because the incumbent cannot know how long an entrant will need to enter, so cannot lower prices just outside of the timeframe. In fact, if an incumbent does lower its prices, it merely starts the clock for the entrant, giving it an incentive to quickly enter the market. In the case of highly complex industries, an exception may have to be made, as entry may take much longer than is typical.

4 What is "substantially below"?

Edlin suggests the price rule should only apply where an entrant prices "substantially below" the incumbent.³⁷ The reason for this is to "encourage entrants to enter with gusto at ...high capacities.³⁸ The simplest approach to determining whether prices are "substantially below" the incumbents is to use a percentage rule, for example requiring prices to be 20% below the incumbents. This rule has the advantage of certainty for both the entrant and the incumbent (although the incumbent is required to guess the entrant's costs to determine where they should price). However, this rule may be seen to be too inflexible: depending on the elasticity of demand, a 20% price drop might have a very large or a very small change to the market. In some low-margin markets, a 20% drop may never be feasible. The percentage rule could be modified by setting different percentages based on different types of market - this would require a logical and clear system for doing so, but would help to ensure the rule can apply in a variety of different markets. Another approach could be to leave it entirely up to the courts as to whether prices were "substantially below" the incumbent's price. While incumbent firms would argue this leaves them in a precarious position, not knowing where it is safe to price, it is likely that firms in fact have a sufficient understanding of their own industry to know what a substantial price drop looks like, and what steps would be needed to avoid it.

³⁷ Edlin above n 13 at 967.

³⁸ Edlin above n 13 at 967.

5 How long should a price floor last?

When applied, the price floor should act as its own punishment for the firm, and also as a "prize" for the entrant. The floor should therefore be long enough to justify the costs of entry..³⁹ It should not however be so long as to encourage entrants to enter solely for the duration of the price floor, exiting the market once the incumbent can again compete. The floor should also not aim to cause undue harm to the incumbent, who, after all, is a key competitor in the market. Once again, in the interests of certainty the best approach appears to be a specific time period.

6 How should a breach be punished?

If the view is taken, as Edlin does, that a breach of the price rule is simply a form of predation, then a breach should be punishable in the same way that classic predation is.⁴⁰ However, there could be an argument that harsher punishments are justifiable. The price rule aims to create a culture of consistency and clarity. At times, the actual harm that limit pricing causes to the entrant may be low compared to the long-term damage to consumers: Breaches of the price rule are not only directly harmful to the potential entrant, but they create harm in the form of uncertainty, which leads to a chilling effect on competition. Firms have no excuses under this rule because a breach can be proven mathematically. This gives support to the view that large fins may be appropriate even when the action has caused only small losses.

B Restrictions on price drops or output?

While Edlin advocates a restriction on price drops, another potential approach would be to restrict a firm's output.⁴¹ This approach would have less harsh outcomes in the event the rule kicks in: the firm can lower prices to save some market share, but is unable to force the entrant out of the market.⁴² This will mean that incumbents will be less worried about entrants invoking the price rule, and will be willing to price higher, giving more opportunities for entry. Although that means consumers may be faced with higher prices, this could be compensated for by the gains to competition that result from more frequent entry by incumbents. It also has the advantage that non-price competition would also be prevented – entrants are essentially guaranteed any new customers their entry creates. This approach

³⁹ Edlin above n 13 at 969.

⁴⁰ Edlin above n 13 at 966.

⁴¹ Oliver E. Williamson, "Predatory Pricing: A Strategic and Welfare Analysis" The Yale Law Journal, 1 December 1977, 87(2), 284 at 296.

⁴² Williamson, above n 41 at 296

would further increase certainty for potential entrants because their entry is more likely to invoke the price rule. Overall, however, this rule places weaker sanctions on limit pricing behaviour. It should be accepted only if it is necessary to compromise with monopolists to implement a price rule.

C Defences

7 Where entrant is bully

As noted earlier, it is unlikely that an entrant is more efficient than the incumbent. However, the rule could be modified to avoid the potential of a more efficient entrant, by allowing incumbents to lower prices in response to a more efficient rival's entry. There is of course a risk of this exception being exploited, so it would need to be difficult to use. One way to achieve this could be to require firms to apply to the court before being allowed to lower their prices. This would prevent firms from taking a "drop prices now and litigate later" approach. A further requirement could be to show that the entrant's costs were substantially lower than the incumbent's. The price rule still makes sense if both firms are similarly efficient. It should therefore only not apply where it is a clear case of the entrant being the bully.

8 Changes to the market

External factors changing could mean that lower prices are achievable in the market. An entrant should not be able to enter, taking advantage of the change, yet invoking Edlin's rule in response to earlier higher prices. This can be largely avoided by carefully selecting a timeframe as discussed above. However, in the event that the entrant does unfairly make use of a change to external factors, an incumbent should have a valid defence and be able to respond to the entry. This defence should rarely be needed, and it would be fairly obvious when it was, so it should not cause the courts much difficulty.

IX Conclusion

Competition law suffers from being unable to be certain of a firm's intent when it responds to entry with a price drop. Although it is to idealistic to attempt to punish predation on a case-bycase basis, that does not mean regulators should take the side of powerful incumbents. Although harder to identify, above-cost predation may well be causing more harm than could be caused by false-positive detection. The only solution is to swing the pendulum to the other side and implement a rule that harshly punishes firms that behave unfairly towards potential entrants. Edlin's price rule could ensure that competition flourishes, delivering innovation, choice and lower costs to consumers. To seriously consider implementing this rule would require careful drafting to ensure certainty is achieved for both entrants and incumbents. But in fact, Edlin's price rule could be easily implemented to make a noticeable improvement in how firms exercise their market power.

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