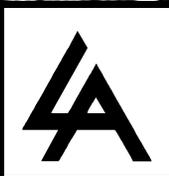
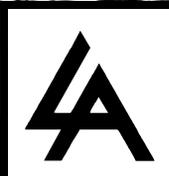


THE EFFICIENCY OF FREE COMPETITION



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FOR LIFE, LIBERTY AND PROPERTY

THE EFFICIENCY OF FREE COMPETITION

BRYAN CAPLAN

“Neither economists nor engineers can decide the most efficient size of a firm in any situation. Only the entrepreneurs themselves can determine what size of firm will operate most efficiently, and it is presumptuous and unwarranted for economists or for any other outside observers to attempt to dictate otherwise. In this and other matters, the wishes and demands of the consumers are ‘telegraphed’ through the price system, and the resulting drive for maximum monetary income and profits will always tend to bring about the optimum allocation and pricing. There is no need for the external advice of economists.”

— Murray Rothbard
*Man, Economy and State*¹

“Capitalism stands its trial before judges who have the sentence of death in their pockets. They are going to pass it, whatever the defense they may hear; the only success victorious defense can possibly produce is a change in the indictment.”

— Joseph Schumpeter
*Capitalism, Socialism, and Democracy*²

“The question for antitrust is whether there exist artificial entry barriers. These must be barriers that are not forms of superior efficiency and which yet prevent the forces of the market — entry or the growth of smaller firms already within the industry — from operating to erode market positions not based on efficiency. Care must be taken to distinguish between forms of efficiency and artificial barriers. Otherwise, the law will find itself — indeed, it has found itself — attacking efficiency in the name of market freedom.”

— Robert Bork
*The Antitrust Paradox*³

1. Introduction

Orthodox welfare economics extols the virtues of so-called “perfect competition”, the most peculiar aspect of which is that there are a huge number of tiny firms in each market. The upshot of this is that each firm’s demand curve is perfectly horizontal, which implies (as countless diagrams show) that the firm automatically maximizes total surplus by maximizing its own profits. The point of this paper is not to deny that this market structure is a sufficient condition for economic effi-

ciency in some cases; rather, its point is to deny that this market structure is a necessary condition for economic efficiency. Confusion over this distinction has led to two intellectually disastrous mistakes.

First of all, economists’ admiration for perfect competition has led them to favor (with varying degrees of consistency) forcing all markets into the Procrustean mold of perfect competition. Alas, the result of this could only be to sacrifice obvious economies of scale in many industries and to punish firms that grow because of their exceptional ability to satisfy consumers.

Second, the exclusive focus on how unregulated markets deviate from perfect competition has led economists to neglect the anti-competitive character of regulation itself. This blind spot is especially clear when laws whose announced purpose is to promote competition (such as the anti-trust laws) actually wind up stifling it.

Saying that perfect competition is sufficient but not necessary for economic efficiency implies that there are other market structures consistent with economic efficiency. In that case, which others? My answer is that whatever structure emerges from free (*not* “perfect”) competition tends to be optimal; in contrast, when legislation hampers free competition, no such tendency exists. The reasons for thinking this will be explained in the second section. The third section will consider the numerous implicit or explicit denials of this view, all of which must claim that firms have a route to prosperity other than efficiently serving consumers: to wit, destroying or discouraging competitors (usually termed predation), or cooperating with their presumed rivals (usually termed collusion). These are serious objections to my theory. My answer to them is not to deny the possibility of such tactics, but rather to show that the process of free competition itself can remedy these problems. The fourth section discusses regulation as it pertains to competition, arguing that the very essence of regulation is typically to curtail and hamper the process of free competition, and thereby the tendency for whatever market structure exists to be maximally beneficial. These harmful regulations include, most notably, many laws whose announced purpose is to promote competition. The fifth section applies this outlook to such controversial areas as mergers, price-fixing, and natural monopoly, all of which are usually assumed to absolutely require regulation. This section

should at the same time clarify what my view does and does not claim about the efficiency of markets: it does not make the extravagant claim that all free markets are perfectly efficient, but rather shows that the process of free competition always tends to reward efficient behavior (whether allocative or productive) and punish the opposite. The sixth section brings public choice theory to my defense, admitting that an ideal regulator might in certain instances increase efficiency (and this ideal regulator appears to be the person economists always have in mind when they discuss regulation), but denying that as a practical political matter there is ever adequate reason to trust the government more than the market.

2. Why Free Competition is Efficient

The core intuition is this: Firms that have attributes that make them able servants of the consumers tend to survive, grow, and multiply, and firms that lack these tend to shrink, die, and become extinct. And this fact holds day after day, without break, so it is reasonable to think that whatever firms exist at a given moment in time are currently the very best at what they do. Put as a rhetorical question: “If someone else can do it better, why don’t they?” And this point holds true regardless of what in particular able service to consumers requires. If consumers want yellow products, firms that produce them prosper and those that supply other hues languish. If differentiated products please consumers, then firms that differentiate their products will survive; if consumers do not care for variety, firms that waste money to supply it will suffer. Etc. It is difficult to imagine an economist who would deny this.

Yet almost all economists fail to apply the same logic to factors like the size and number of firms. But the parallel is exact. If large size makes firms efficient at serving consumers due to economies of scale, then large firms will tend to grow and small ones will die or be absorbed. If small size makes firms efficient due to diseconomies of scale, then small firms will multiply and large ones collapse or split. If fewness of firms leads to collusion against consumers, then that very fact means that hold-outs or new entrants have an extra incentive to spring up, making the problem less likely. If the great numerousness of firms leads to lack of innovation, then that very fact encourages firms to merge or grow. It can hardly be denied that size and number of firms are two factors that affect their efficiency; nor, when stated baldly, is the thesis that smaller and more is always better very plausible. The view that smaller and more firms are always better really begins by assuming that atomism is most efficient by drawing only cost curves that imply this; and yet, if we drop this assumption it is easy to imagine the opposite. Envision, for example, “trust-busting” the American auto industry into a thousand firms; it is difficult to think that any of them would be viable since they would be far below the efficient scale. Then repeat this thought experiment

in reverse: imagine that the anti-trust laws are abolished and the thousand firms may grow or merge as they please. The result would be that firms would increase in size and decrease in number, precisely because this adaptation is necessary to efficiently serve consumers, and that is necessary to survive.

But isn’t this analysis too simple? Granted that free competition rewards productive efficiency, but doesn’t it at the same time hurt allocative efficiency? There is some truth in this view, although the case is weaker than usually supposed. The short answer is this: Frequently, a desirable attribute correlates with an undesirable one: in this case the desirable attribute is productive efficiency, and it is alleged that this correlates with allocative inefficiency. But there is nothing peculiar about this problem. For example, some food that tastes good is unhealthy, and some ambitious managers have short tempers. The market takes account of these correlations by balancing the good against the bad. Free competition does not encourage unlimited tradeoffs of allocative for productive efficiency; rather it is neutral between them. If a firm is very productively efficient but charges prices grossly inefficient from an allocative perspective, it creates an opportunity for a smaller firm to enter so long as the benefit to consumers of the allocative efficiency (lower prices) does not outweigh the harm due to loss of productive efficiency (higher costs).

More directly, there is a strong reason to think that allocative efficiency can always be approximately achieved in any market structure, because above-average rates of return always attract new entrants. It is the unfortunate defect of most monopoly and oligopoly theory that it considers only situations with a fixed number of competitors; yet this is hardly realistic. In the real world, above-average profit (the risk factor being equal) is a clear signal to the whole world that more firms belong in a market; similarly, below-average profits indicate that some of the existing firms must go. And this holds true not just for markets with thousands of tiny firms, but for all markets. Even in the case of pure monopoly, the existence of above-average profits tells the whole business community that profit can be made by entering; and it is difficult to imagine that such entry will not occur. Here is an important corollary: Legislative interference with free competition breaks the link between firms’ survival and their ability to please consumers; it also stops the tendency towards equalized rates of return. It is true that under interventionism, the “fit” still survive and thrive. Unfortunately, the fit now become those who can most effectively influence the legislative process to win favors for themselves and bring harm to their competitors. Firms with a comparative advantage in influencing law-makers will probably use that advantage to increase their profits. They might lobby directly for a subsidy; or perhaps they would lobby for tariffs and quotas. (The list extends forever.) Observe the consequence: Now, firms

can survive and prosper without pleasing consumers better than anyone else; rather, firms that please legislators more effectively than their rivals may win out, even if the rivals are the consumers' choice. This is the law's injury to productive efficiency.

In a like manner, the law may hinder allocative efficiency. Suppose the state creates a protected monopoly — any competitor gets sent to jail. It is now likely that the monopolist will earn an above-average rate of return indefinitely. The same holds whenever the law discriminates in any manner against new entrants. For example, a license levied on new entrants might permit existing firms to maintain an above-average rate of return, creating perpetual pockets of allocative inefficiency.

Perhaps at this stage I will be accused of colossal ignorance. Everyone knows that average cost pricing isn't good enough for allocative efficiency; we must have marginal cost pricing for that. And only in the case of perfect competition are the two things equal, right?

Actually, you can draw diagrams where a small number of firms produce at $MC = AC$. More interestingly, there are many industries with an atomistic structure that depart radically from marginal cost pricing, like restaurants on off-nights and movie theatres for the matinees. (Admittedly, these industries lack some other characteristics of perfect competition since their products are differentiated.) But leaving all this aside, I think that the ideal of marginal cost pricing is mistaken, and that we should be more than happy with a tendency toward average cost pricing.

Any freshman can draw the welfare loss triangle resulting from lack of marginal cost pricing. But while this is theoretically interesting, we need to consider the full context. Since markets do not always tend to marginal cost pricing, getting there requires some kind of price regulation, subsidy, or direct government supply; average cost pricing, in contrast, is the spontaneous tendency of the market. In other words, we cannot choose the end all by itself without at the same time committing ourselves to certain means. And these two contrasting sets of means taken by themselves have profound consequences for efficiency.

First, average cost and marginal cost pricing must attain equilibrium in opposite ways. AC pricing can rely solely on market forces which attract entrants to high profit industries and encourage exit from low profit ones. In contrast, MC pricing requires comprehensive state regulation — either all firms must be subsidized to produce where $P = MC$, or prices must be fixed at marginal cost (which probably requires subsidies to let firms break even), or the government itself must supply the good. All of the latter methods suffer from the government's lack of knowledge and lack of incentive (see section 6); in contrast, average cost pricing, since

it leaves pricing up to individual firms, leaves the decisions up to those who have more knowledge and incentive than anyone else to do the right thing. And while marginal cost pricing might be better taken alone, when we remember the means that it necessitates its undesirability becomes clear.

There are other implementation problems to heed. AC pricing lets consumers pay for fixed costs as well as variable costs, while MC pricing reimburses for variable costs alone. The result of this is that under MC pricing, fixed costs become artificially free, leaving no rational basis for their allocation; AC pricing, in contrast, makes each firm's patrons indirectly pay for fixed costs, giving a rational basis for allocation (the highest bidder). Perhaps most significantly, AC pricing ties benefits to payment; consumption is a private good. But under MC pricing, people pay only a fraction of the cost of the benefits they receive; consumption becomes a partial public bad, since tax-payers bear part of the burden for each individual's purchases. It should not be necessary to explain to any economist why, if we have a choice, it is better to treat something as a private rather than a public good — just intoning "the tragedy of the commons" should suffice.

Due to these considerations, I recommend economists cease criticizing firms for tending to price at average cost rather than marginal cost; the cure would surely be worse than the disease. But what about firms that earn above average cost? Isn't that bad from an economic point of view? The answer is: It depends. If the reason that they earn an above average profit is that they are simply more efficient, then we should be happy — the firm has merely given proof of its successful service to consumers. If the reason, however, is that they have somehow harmed consumers, then the economic picture is not so good.

I hypothesize that an above-average rate of return is almost always due to superior efficiency. I will make this more plausible in the next section by trying to show how unlikely it is to be caused by the other possible candidates, predation and collusion. For the moment, perform this mental experiment.

Imagine the firm of your choice, preferably the one you hate the most, think most blatantly inefficient, etc. Imagine also that it has no legal or political paths to success; there are no subsidies, licenses, regulatory committees, or what have you. Now suppose it hires you as its profitability consultant (for added entertainment, imagine that you get 10% of any increase in profits). What advice would you give to the firm's managers?

Under the circumstances, it is hard to believe that you would not tell them the two obvious counsels: first, give consumers a good deal for their money; second, try to keep costs low. A third one, innovate, also comes to mind. This sounds trivial, and in a way it is: not because it is stupid advice, but because deep-down

we all realize that that is how you make money. At the very least, it is the primary way that one makes money, which shows that my hypothesis that superior efficiency is the cause of supranormal profits has a lot of truth to it. Perhaps economists recognize this, but believe that the non-productive routes to high profits are just as good, maybe better. The purpose of the next section is to show that these alternate routes probably work poorly if at all.

3. Collusion and Predation as Alternatives to Efficiency

Collusion occurs when firms cooperate on their pricing and output decisions without increasing productive efficiency. That is the pure case, anyway. And despite a few free market economists' implausible denials, this clearly harms consumers. For if the struggle for survival among competitors is the source of consumer welfare, then the opposite is surely worse for them.

Predation occurs when firms compete extra fiercely in the short-run in the hope of deterring or killing competitors, after which time the predators enjoy extra profits forever. There is a good reason to think that if this were effective, it too would harm consumers. True, the consumers benefit in the short-run when competition is extra fierce. But in the aftermath (which apparently extends forever if the predation really succeeds) the consumers suffer eternal harm.

No doubt these strategies occur sometimes under free competition. But the crucial question is: How often? Some people, I suspect, believe that we can only find out the answer by doing detailed empirical studies. Without belittling these, I think that pure economic reasoning alone tells us as much about these strategies' effectiveness. In particular, it tells us how free competition checks both of these non-productive routes that firms may pursue towards survival and success.

Let us begin with the less believable case of predation. The first thing to notice is that the firm that predated suffers as much as its "prey", and probably more. For if the predator cuts prices so much that its competitor loses money, then the predator himself will probably have to lose money too. And consider further: Normally, the predator will be a market leader, and the prey will be smaller. So the absolute loss of the predator will be greater. It is as simple as the mathematics: A firm's profit/loss equals price minus average cost, multiplied by the total quantity sold. The greater the quantity, the greater the loss. And consider this: By lowering the price, the quantity demanded will increase, (and sharply if the consumers are smart enough to anticipate future high prices) thereby increasing the losses of the predator still more.

Turn your attention to the prey. What is his best strategy? One obvious choice might be to shut down temporarily; or if the industry sells durables, he might

simply sit on them. The key thing in the mind of the prey is that if he can weather the storm he will enjoy high profits in the future. This has got to be true for the prey, because a future of high profits is precisely what motivates the predator in the first place.

Strangely, whenever people bring up predation scenarios, they always imagine General Motors (or another huge firm) preying on a tiny Mom-and-Pop store. But why assume this? After all, if a dominant firm is big and making big profits, then would-be competitors will be similarly large and well-funded. In the modern world economy, even the largest firm is small relative to all of the investment capital in existence. So if a clear profit opportunity exists, why wouldn't a new giant be able to get funding? For that matter, if a bank saw that a tiny Mom-and-Pop store would make lots of money if it could survive a short-run assault, why wouldn't the bank approve the loan? Just because a firm is small does not mean that a large bank or other source of funds would not be happy to fund it so long as their expected income stream is positive.

Most economists who think about predation conclude that it could only work as a deterrent. That is, a firm might suffer huge losses once in the hope that they need never do it again. This too lacks plausibility. There is reason to doubt that predation could work the first time. And even if it does, the threat to repeat the predation would be, as game theorists say, "incredible" if the new entrant's funding were comparable to that of the predator. And there is every reason to think such funding would be forthcoming if the expected income stream were positive.

Think about predation from another angle. Isn't it downright silly to try to make profits by perpetually cutting prices, suffering gigantic losses, driving your competitors out, jacking up prices, and then repeating this pattern each time a new competitor shows up? Wouldn't it be easier to simply keep prices reasonable? This seems especially likely when we consider that it is usually the dominant firm that is a potential predator. But to become a dominant firm, one must first become big the difficult way: by pleasing consumers better than anyone else. Since dominant firms have or at least once had a comparative advantage in efficiency, their best strategy would probably be to simply maintain this advantage.

Here is another peculiarity about predation: the act is solely in the mind of a firm's managers. By this I mean that two firms might pursue equally aggressive strategies, but one firm merely competes to the best of its ability and the other practices predation. The common view that a firm that sells below cost must be a predator is mistaken; after all, new entrants often knowingly lose money for their initial years, considering it an investment in a name-brand. Similarly, an established firm might willingly sell below cost to break into a new area or maintain its current market

share. And none of these activities are predation as commonly understood.

This fact — that whether or not something is “predation” lies solely in human intentions — has a vital practical consequence: it is nearly impossible for an outside observer to distinguish predation from earnest competition. Both give consumers a better deal, and thereby harm one’s rivals. It is therefore likely that if one criminalizes predation, one also winds up punishing normal competitive behavior. Suppose I want to cut my prices to get a larger share of a market. But if I do so, this will harm my competitors; perhaps one will even go bankrupt. And isn’t the effect of that identical to that of predation? And doesn’t that mean that the law will likely interpret it as such and punish me for it? Perhaps I won’t cut my prices after all, to my customers’ loss.

Economic theory alone, therefore, gives us strong reason to doubt whether predation exists at all; and to the extent that it does exist, the unintended consequences of prohibition of predation are alarming. Let us then turn to the second way that firms could potentially earn high profits non-productively: collusion.

It is important to remember that collusion is not cooperation as such. After all, the firm itself is a form of cooperation between individuals who would, if self-employed, likely be competitors. No, the whole problem of collusion is that it is cooperation not designed to realize productive efficiency, but rather to benefit the firms at the expense of allocative efficiency.

This kind of behavior, *prima facie*, is much more likely than predation. Why? In game theory there is an important conclusion that tells us that in repeated games the best strategy for everyone is usually the “nice” one of cooperation. The reason is that in long-term relationships, what goes around comes around, so if you don’t cooperate now, your opponents will not cooperate with you later. And since rational people figure this out, everyone cooperates. While this conclusion is ordinarily heartening, since it implies that cooperation can evolve without central authority, it makes the problem of collusion seem dire indeed. For a moment’s reflection tells us that if an industry only has a few firms, and if each of these firms has a long lifespan, then they are likely to cooperate to raise prices and restrict output at consumers’ expense. Indeed, it seems that collusion might easily erupt without any explicit communication among rivals.

But things aren’t as dire as they first appear. First of all, the repeated game strategy only yields cooperation when information is fairly certain; if I can’t ever know if my foe cheats me, the rational strategy for him is to cheat me every time. But if I realize this, then the rational strategy for me is to cheat him every time too. So no cooperation develops. Of course, firms do have some idea about whether or not their rivals compete

more fiercely than they agreed upon, but this knowledge is far from certain. And if a firm retaliates mistakenly, cooperation may well break down altogether.

Another difficulty is division of spoils. A group of firms may know that they can all increase their profits if they all raise their prices in concert. But once this happens, how will they split up the extra profits? Everyone is likely to want a large cut. Large firms will demand more on account of their current large market share; small firms, in contrast, will demand more in order to grow. Established firms will likely want to stick to the *status quo*, while up-and-coming firms will request an ever-increasing share of the cartel profit. It is also likely that within each cartel there will be one or two firms that believe that they would do better than their fellows if collusion should ever break down. On account of this they will be less eager to keep the cartel together.

Next is the problem of the hold-out. This occurs when there are three or more firms, all of which seek to collude. But each of these firms recognizes that it would benefit most if the other firms colluded with each other, but did not itself participate. And as the number of colluders increases, the problem worsens. Often, all that would be necessary for an agreement to fail is if one firm refused to join the club. Moreover, the temptation to be the hold-out is there for each firm. This could make collusion quite difficult.

Next there is the problem of cheating, alluded to above. Assuming that the collusion is merely tacit and not contractual, each firm has a strong incentive to make its rivals believe that it colludes, but secretly compete instead. It might, for example, give under-the-table discounts, sell over its quota, or give a higher quality product for the same price. The demand curve to each firm will probably be quite elastic, sweetening the temptation. But of course if every firm succumbs to this incentive, then collusion collapses.

Partners in collusion might add a monitoring and enforcement component to get rid of cheating. But the problem is that this markedly increases the transaction costs of striking the deal. Indeed, the more intense the monitoring and enforcement, the more likely it is that each firm will decline to join because the costs of enforcing the deal outweigh the benefits. After all, if a single firm were really the most efficient structure for an industry, it would have evolved naturally. So in industries where this hasn’t happened, it must be because the costs of greater size (information, administration, etc.) exceed the benefits. The stricter a cartel becomes, the more the industry begins to act like a single firm. But the very fact that one firm did not naturally out-compete all of its rivals implies that a monopoly structure is productively inefficient. And productive inefficiency exceptionlessly hurts the profits of firms regardless of other factors.

I have left the strongest check against collusion for last: new entrants. It is a general rule that industries that earn an above-average rate of return attract new firms. And since the very purpose of collusion is to give all industry members an above-average rate of return, new firms will almost surely spring up. At this point, the cartel has two choices: either they can let the new firm join the cartel — which means that each current member will lose a share of its cartel profits — or they may compete with the new entrant. If they try the former, then they will surely find the whole business community knocking on their door, asking for their quotal portion of the market. The cartel will swiftly dissolve under this pressure.

Alternatively, the cartel may compete with new entrants rather than cutting them in on the deal. But standard competition with new entrants defeats the whole point of the cartel, since the members can no longer earn above-average profits. And since the transaction costs (plus integration, monitoring, and enforcement costs) are positive, most members of the cartel would probably benefit by simply dissolving it. And of course if the cartel turns to predation, it faces all of the problems discussed earlier, plus the problem of coordinating the cartel's strategy. Other methods of handling new entrants seem equally impotent. If one tries to buy up all competitors, then this creates an incentive for people to build new firms just to extort "blackmail" money -- as John D. Rockefeller learned when he tried this tactic.

It is true that new entry does not occur instantaneously as the theory of contestable markets demands. Perhaps this gives cartels some finite duration during which they can work. Perhaps. However, in the real world exit is not costless either. So if a few firms form a cartel, earn monopoly profits for a year, and then a new entrant shows up, they are going to have to deal with this new rival for a long time, maybe permanently. And in the process of competing with the cartel, the newcomer may earn a long-lasting advantage over them in terms of market share and reputation. One historical example that comes to mind involves Ford's early near-monopoly over the American automobile industry. Ford was unresponsive to consumer demand, in particular to the preference for model and color variation. General Motors entered the market and satisfied this demand, eventually becoming the industry leader. At this point, Ford changed its ways, but too late: ever since, GM has retained the ranking position. This possibility should give pause to any firm intent on earning a short-run profit by exploiting a temporary monopoly or forming a cartel.

Perhaps the critical reader finds me excessively optimistic about the power of new entrants. Are there not formidable "barriers to entry" that stand in their way? My answer is that the only real barriers to entry that should concern us are legal barriers, which prevent otherwise qualified firms from competing. Other so-

called "barriers to entry" are indeed barriers, but they are the same barriers that all producers must face, incumbents as well as new entrants — barriers such as economies of scale, advertising costs, brand loyalty, and the most spurious of all, superior efficiency. Why should we think that these costs impose a unique penalty on new entrants? The only value of new entrants, from an economic perspective, is if they can do the job better than incumbents. Entry as such is neither good nor bad; it is the entry of more efficient firms that is desirable. It is true that there are definite start-up costs that new firms must bear (for example, the cost of training a work-force). But as always, costs tell us something: that letting new firms appear uses social resources, and those resources are scarce. Even if a new entrant could compete successfully after its initial start-up period, it does no favor to consumers if they must subsidize or otherwise help the entrant; for surely there are many firms that could be successful "if only for" one other crucial factor (e.g., a great manager, a brilliant innovation, enthusiastic workers, etc.). But consumers benefit only from firms that really are efficient, not firms that could have been efficient if circumstances differed. I suspect that economists' obsession with new firms' difficulties stems more from their egalitarian values than any economic considerations.

Out of the triad of collusion, predation, and superior efficiency, only superior efficiency can consistently cause above-average profits. While predation or collusion might give supernormal profits on occasion, they are riddled with difficulties. Indeed, their difficulties are so great that they might very well correlate with below average profits. Just because firms that use these tactics want to earn more money does not mean that their plans won't utterly backfire, especially when the means are so poorly fitted to the end. My reasoning thus far yields the following formal argument:

1. Predation, collusion, and superior efficiency exhaust the possible causes of supranormal profits under free competition.
2. The connection between efficiency and profit is undeniable.
3. The link between predation/ collusion and profit is dubious at best.

Therefore:

Supranormal profits are almost always the result of superior efficiency and of no other factor; or, put another way, the only attribute that is evolutionarily strategic under free competition is efficiency in satisfying consumers.

4. Regulation versus Competition

Reflection on most regulation shows that it directly leads to less efficient satisfaction of consumer preferences. Since free competition maximally encourages

service to consumers, any legislation regarding a product's quality, price, or method of production blatantly harms its alleged beneficiaries. To illustrate: If the law decrees that only cars with seat belts may be sold, consumers who would rather save some money than pay for the extra safety suffer; if the law orders that no gold may be sold at over \$1 per pound, consumers willing to pay more money for additional gold lose utility; if the law prohibits off-shore drilling, then consumers indirectly suffer from firms' sacrifice of productive efficiency. None of this would be worth stating if this analysis were not so completely ignored by economists and laymen alike. Economists typically try to rationalize (with little plausibility) that these laws correct market failures; but the real reasons for such regulations are paternalism (workers don't value safety enough, consumers aren't smart enough to avoid fraud, etc.) bolstered by the Marxist view that capitalists are all-powerful and therefore don't need to supply safety, quality, etc. Regulation of third-party effects (i.e., externalities) is the exception to this rule, because it does have a plausible economic rationale; but the argument against government involvement even in this case I save for a later work.

More interesting are the indirect effects of regulation. Free competition is a continuous evolutionary process, while the standard effect of regulation is to make the status quo permanent. For example, under free competition there is an inexorable tendency for rates of return to equalize as firms enter high-profit and exit low-profit industries. But if regulation caps profits in high-return fields and subsidizes low-return ones, this beneficent process ceases — to the loss of all consumers. Another instructive example is government-protected cartels. The standard result of free competition, we have seen, is to erode and stop cooperation between firms when there are no significant gains to productive efficiency. But when the government declares entry illegal, punishes cheating, forces recalcitrant hold-outs to join the cartel, and so on, it short-circuits the market's spontaneous checks against collusion.

More interesting still are the harmful consequences of legislation whose announced purpose is to help consumers by "increasing competition", such as the American anti-trust laws. Under the influence of the doctrine of perfect competition, these laws have arbitrarily singled out the attribute of "bigness" as harmful to consumers. And yet, far from hurting them, firms that win large market shares under free competition thereby demonstrate that they gratify many consumers, and that large size is probably vital to that effort. Even if there are no important economies of scale, consumers benefit when firms that figure out how to satisfy them can freely expand. On top of this, there is no clearer case of injury to consumers than if the anti-trust authorities decide to narrow the range of available suppliers, even if they do so in the name of competition.

Many people favor strict limits on market concentration in order to increase competition and thereby benefit consumers; for example, Ralph Nader once favored an absolute limit of a 12.5% per firm maximum market share across all markets. Aside from the arbitrariness of what constitutes a "market" (in the real world, all goods compete with all other goods to some extent) the clear effect of this would be to encourage restriction of output. If I have 12.4% of the market, I am certainly not going to try for more under Nader's system. In fact, I should raise my prices and cut back on output to make sure that my firm doesn't accidentally exceed the limit and get dismembered. Considered this way, proposals of this kind are really a multi-pronged attack against consumers. Not only do they positively encourage firms to restrict output, they also limit consumer choice, prevent the most efficient firms from growing, and reduce the incentive of all firms to do their job well by putting a ceiling on their ambition. Since one of the chief rewards of innovation is market leadership, dynamic efficiency drops as well.

We have never implemented the Nader proposal, so we have never witnessed its dire effects. But the same analysis holds true of many actual laws and rulings whose sole function is to attack market concentration that arises under free competition. In each case, the result is that big firms get the perverse incentive to restrict production before they become big enough to become anti-trust's next scapegoat.

5. The Hard Cases

Try this mental experiment. Congress passes the following statute: "Productive inefficiency is hereby declared illegal. Violation of this statute shall be punishable by five years in jail, or a \$100,000 fine, or both. Consumers damaged by the inefficiency may file a separate private suit for treble the damages. The Department of Productive Efficiency is hereby established to interpret and enforce these provisions." How could any economist, *qua* economist, possibly oppose such a law?

I see two chief objections to such a law. The first is that free competition already discourages productive inefficiency, so there is no need for such a law; in fact, such a law weakens the market's response by making it less necessary. The second objection is that it is very difficult to correctly identify productive inefficiency, especially for an outside observer like the government; the probable result will be to punish many business practices that are actually efficient but which the government does not understand. From a slightly different perspective: the market's spontaneous tendency is to eliminate productive inefficiency, whether anyone correctly identifies it as such; regulators, in contrast, must make a more difficult direct determination that something is inefficient. We know from economic theory that whatever practices the market weeds out are inefficient; in contrast, regulators must individually investi-

gate each alleged inefficiency before they can possibly identify it as such. These two objections give us a solid economic case against such a law.

There is no law forbidding productive inefficiency; but there are many laws with comparable initial plausibility that nevertheless turn out to be a bad idea from a purely economic point of view, and for the same reasons. Three such cases are natural monopoly regulation, merger restrictions, and prohibition against price-fixing. Almost everyone agrees that such regulations are necessary, vital, and surely helpful to the consumer. But as Bastiat explained, that is because they focus on what is seen, to the detriment of what is not seen — and good economics demands that we focus on both.

Let us begin with natural monopoly regulation. Supposedly, there exist industries whose cost curves are such that more than one firm is inefficient. But if there is only one firm, there will be monopoly pricing, which is also inefficient. Therefore in order to get the benefit of both efficiencies, the government permits the monopoly to exist, but regulates its rates, typically to give it an average rate of return.

This story sounds wonderful until we apply the same objections to natural monopoly regulation that we did to my hypothetical anti-inefficiency regulation. The first objection is that when regulation prevents some problem, it crowds out the market's solution. No longer will the natural monopolist have to fear potential competition — its profits have a guarantee. No longer will the natural monopolist have to fear inter-industry competition either. The regulation also weakens the other important effects of the market: there is no longer any incentive for productive efficiency or innovation, because the rate of return is fixed no matter what.

If this seems implausible, think about the thousands of local monopolies in small towns that only have one grocery store, one hardware store, etc. They are not subject to natural monopoly regulation; but natural monopolies they are. What checks their behavior? The answer is that market forces do the job. There are potential entrants who will start business if local monopolists charge excessive prices; as in every other case, above-average rates of return attract new entrants. Inter-industry competition also checks their behavior. Farmer Smith may have a monopoly over poultry, but he must still compete with the farmers who have monopolies over beef, pork, and dairy. And I have yet to hear anyone who believes that every small town needs an army of natural monopoly regulators, so there is no reason to think that the market's checks here are inadequate.

We now come to the second problem, the problem of knowledge. How do you really know that an industry requires a monopoly if you never allow competition? How do you know that new entrants won't appear if you never legally open up the option? And even if an

industry requires a natural monopoly at one time, that hardly proves that it requires monopoly in perpetuity. But as soon as natural monopoly regulation in general springs up, you can be sure that it will sometimes be applied when it is not necessary. The problem is that regulation requires direct judgments about complex phenomena. Unlike the market, which we know tends to do the right thing whatever it is, natural monopoly regulators must weigh a mass of specifics — a more challenging task by far, and hence more likely to wind up in error. Next we come to merger regulation. We know that mergers sometimes lead to large increases in productive efficiency. But we also know that mergers increase concentration, thereby making output restriction and collusion easier. Therefore, most economists conclude, the government's approval should be necessary for mergers, and the government should prohibit mergers whose costs to allocative efficiency exceed the benefits to productive efficiency.

Again, there are two key objections to this approach. First, it undermines the market's checks against unproductive mergers. Analytically, a merger with no gains to productive efficiency is almost identical with collusion. And we have seen that the market penalizes collusion. But if the law addresses the problem too, it makes the market's checks superfluous. The result is more reliance on the government to solve problems, and atrophy of spontaneous market solutions.

Second, there is the problem of knowledge. We know from economic theory that unproductive mergers get punished by market forces, without knowing which particular mergers are unproductive. The government's position is different: in order to deter unproductive mergers, it must know the efficiency characteristics of each and every merger. A complex judgment like this is likely to err. The result is that many productive mergers may be forbidden, to the loss of consumers. This fact becomes even clearer when we remember that the essence of entrepreneurship is to see an opportunity that no one else sees; all innovation must begin with an individual who disagrees with what most people think. To subject entrepreneurship to bureaucratic veto is virtually to abolish it.

What about price-fixing? Unlike mergers, this seems to have no possible benefits. But appearances deceive. Many economists have argued, for example, that resale price maintenance could enhance efficiency. If there had been free competition, the market would have preserved resale price maintenance but punished inefficient price-fixing. However, since the issue was resolved bureaucratically, both are illegal.

The problems of price-fixing regulation are the same as those of natural monopolies and mergers. When the law punishes price-fixing, the market's natural checks on it atrophy. More interestingly, the market has no incentive to invent more effective checks. Jay Gould, the nineteenth century industrialist, made much of his

fortune by locating pockets of collusion in the railroad industry and then entering those markets. He lived when price-fixing was legal, so he had an incentive to discover a better way to profit from other firms' collusion. There isn't much incentive to do so today.

And as the resale price maintenance example points out, there is the problem of knowing when to apply the law. At least some forms of price-fixing might enhance efficiency. Note further that firms must avoid actions that look like price-fixing, even at the cost of efficiency gains. An example of this is joint ventures. When firms cooperate on a single project, they open themselves up to the charge that the meetings are merely a front for price-fixing. Fearful of the law, they may sacrifice an otherwise lucrative endeavor. If we left market forces to check collusion then whatever is efficient would tend to survive, even though we could never directly figure out whether a particular practice is harmful or beneficial. Regulation, however, must make particular judgments if it is to regulate at all. The result in this case, as in all others, is that the law ends up punishing efficient business practices out of ignorance.

Perhaps the critical reader finds my argument for unregulated mergers plausible, but not my argument for unregulated price-fixing. I think that accepting the first logically requires the second; here's why. Imagine that my rival and I want to fix prices, which is illegal. Then one of us remembers that all mergers are legal, so we decide to merge, knowing full-well that the merger is unproductive, in order to legally fix prices. Unfortunately, our price-fixing is now more stable than it would have been otherwise: Before, we were two firms, with the corresponding problems of cheating, division of spoils, and so on. But now we are one firm, so the only check on us comes from external competition, not from internal breakdown of cooperation. The result of the selective prohibition has been to encourage stronger collusion over weaker. Wouldn't it have been less inefficient if we could have simply legally fixed our prices without merging? The indirect result of the joint policy of unregulated mergers and regulated price-fixing is to encourage substitution of unproductive mergers for price-fixing. It is as if a firm reprimanded embezzlers but fired people who showed up for work five minutes late — the more severe harm gets punished mildly and the less severe harm gets punished sternly. Accordingly, there is no good reason to think that consumers are better off under this alternative scheme, and at least some reason to think that they are worse off.

In conclusion, let me clarify what my theory claims. It does not claim that inefficiency does not exist on the free market. It does not claim that markets are always perfect at every moment in time. It does not claim that checks against collusion operate instantaneously. What it claims is something more modest: Free competition always tends toward efficiency; there are market forces that counteract both allocative and productive inefficiency;

and these forces act regardless of whether or not outside observers can know if any inefficiency exists. My theory is also a critique of using government to supplement the market's checks on inefficiency. It does not say that no regulations ever increase efficiency. It does not say that we can never know whether a market is inefficient. What it does say is that regulation atrophies and crowds out market checks on inefficiency, and that regulation suffers from an inevitable knowledge problem whenever applied to the complex real world. My defense of free competition parallels the utilitarian arguments for free speech. No one claims that under free speech, people utter only wise, logical, or thoughtful words. But laissez-faire in the realm of ideas nevertheless better promotes (or rather permits) wisdom, logic, and thoughtfulness than any brand of censorship. The case for free competition is actually stronger, because efficiency merely requires that the market satisfy whatever preferences consumers happen to have, whereas free speech only yields intellectual fruit if people have a preference for truth — and, alas, few people really do.

There is a final component to my critique of government, which I have saved for the last section. Even if our regulators were perfectly informed, they would still not necessarily do the right thing from an economic point of view. Why not? Because when you bestow vast power on any body of people, especially a group of "experts" whose reasoning most people cannot follow, there is the temptation to abuse that power. The last section explores this temptation in depth.

6. Regulation: A Public Choice Perspective

No one believes that workers would work very hard if they were not paid, or that entrepreneurs would establish and run firms if they could not keep their profits. The reason is that they would lack the incentive to do a good job. There might be a few people who love working so much they would do it for free, but not many. Imagine a more extreme case, in which workers not only aren't paid but are charged for the privilege of working. With perverse incentives like this, only fanatical workaholics would show up at their jobs. The market solves this problem, of course, by giving positive incentives to do the right thing; that way, we rely on a very common attribute — desire for money — rather than the rare love of work for its own sake.

Economists usually see the task of politicians and bureaucrats as the promotion of economic efficiency; they then leap from this normative judgment to the descriptive judgment that that is what actually happens. The inference is invalid. There is no reason to think that in fact politicians and bureaucrats always strive to promote efficiency, any more than there is a reason to think that all workers always work hard. In the later case, the market completes the syllogism by providing incentives that link the workers' earnings to their effort.

But is there any parallel incentive for politicians and bureaucrats? If there isn't, then economists' trust in government amounts to a pure act of faith.

Some people say that democracy — and voting in particular — gives the proper incentives. And if voters were well-informed, issue-oriented people, this might work. But that is a very big "if". Think about almost any economic issue, and ask yourself if many voters could even explain the issue, much less offer arguments for one view or another. The answer is clearly no. On top of this, how many voters care about issues anyway? Issues are never irrelevant, but even casual observation of American election campaigns shows that they are only one of many factors that determine success. Images, emotions, looks, prejudices, and honeyed words are others.

On top of this, there is an obvious economic explanation for the voters' debased condition. It is that intelligent voting is a pure public good. We all benefit if voters inform themselves about issues and decide on the best available evidence. But no individual voter has any incentive to do so. The benefits of good voting are public, but the costs are private. So why should we think that democracy gives politicians and bureaucrats good incentives? I don't see any reason at all.

But the situation is actually worse. While the voting public does not give politicians and bureaucrats positive incentives to promote efficiency, other factors give them positive incentives to promote the opposite. The clearest is the motive of power. Most people love power almost as much as they love money; and the people who go into politics are likely to be those who have an unusually strong love of power. And how does one expand one's power? One does it by extending the range of human activity over which one rules. There is therefore a clear and constant incentive for politicians and bureaucrats to claim dominion over progressively wider jurisdictions. Mightn't this have negative consequences for efficiency? Naturally — but the government workers do not individually pay the price. Their incentives are mis-aligned, perverse. More regulation gives them more power, which they like, but harmful regulation costs them little or nothing in either money or power.

There is a second perverse incentive built into democracy. Because elections are primarily emotional and not intellectual contests, voters can be easily swayed by advertising. And advertising costs money. One easy source of money is campaign contributions. But few people want to give a campaign contribution for nothing; they want benefits in exchange. And in a mixed economy, politicians are quite able to bestow many benefits on their supporters. Some benefits are direct — subsidies, government contracts, and so on; other benefits are indirect — like those that injure the actual and potential competitors of a politician's supporters. Both kinds of benefits clearly harm consumers.

Interest group theory shows us that narrow groups seeking concentrated benefits tend to be the most successful. The reason for this comes from public goods theory. The larger a group, the more difficult it is to organize its members into a coherent force, and the less individual incentive they have to join up. Smaller groups, in contrast, are easy to organize, and each member has a big stake in the outcome. An example should make this clear. If Chrysler lobbies for a bailout worth \$250 million to it, it will be very difficult to organize 250 million Americans to stop it. The reason is that individually, we have only a tiny stake in the issue; and even if we were interested, the transaction costs of organizing a lobby would be insurmountable. Yet Chrysler doesn't need to organize at all — it already is organized — and it has a huge stake in the outcome. Legislation of this sort, accordingly, usually succeeds.

The upshot is that politicians and bureaucrats get positive incentives mainly from groups that have no interest in economic efficiency or any other abstract value. They get positive incentives from people who want government benefits, cost what it may to the general public. And most of the evidence is that politicians predictably heed these incentives.

The critical reader may agree with me thus far, but then object with Winston Churchill's famous line: Democracy is the worst system, except for all of the others. What is my better alternative? I agree that I have no better method of government in mind; what I do have in mind is non-government, what the Marxists call "the anarchy of production", and what throughout this paper I have called "free competition". If someone objects to censorship, he does not need to offer a "better" kind of censorship; he may also favor the simple abolition of censorship, the de-politicization of the realm of ideas. This is precisely what I recommend in the realm of production and trade.

This public choice analysis neatly complements the earlier sections. These showed that politicians and bureaucrats cannot normally improve upon markets; public choice theory tells us that due to perverse incentives politicians and bureaucrats do not want to improve upon markets. The former shows that government lacks the ability to increase efficiency, the latter that it lacks the will.

But public choice theory explains something more. It explains the existence of massive quantities of anti-competitive legislation that economists frequently overlook. (Of course, law-makers try to invent efficiency justifications for their policies; but these are transparently pure rationalization.) Politicians can pay back their supporters by hurting their competitors, actual and potential. For virtually any regulation, one need not look too deeply to figure out which special interests benefit from it: tariffs, farm cartels, licensing, immigration restrictions, and so on. The supposedly beneficial

natural monopoly regulation we discussed earlier is another example. Curiously, such regulation almost always makes competition with the monopolist illegal. But if competition were truly impossible, what would the point of such a law be? In rare cases where there are no transfers of wealth, there remain transfers of power — transfers of power to the politicians and bureaucrats who support the law.

Public choice theory has a final insight to bestow upon us. Why is it that there is such a double standard applied when people compare markets and government? Brief reflection tells us that virtually any imperfection or failure “justifies” regulation of markets in the public mind; but government failures, no matter how massive, merely “show” that we need to spend more money, or elect more trustworthy people. This paradigm is absurd on its face — why are market failures always systemic, and government failures always coincidental? To clearly state the question would answer it. One of the reasons for the persistence of this double standard is simply economic self-interest. Behind every piece of regulation there are politicians and special interests who benefit from it; but who benefits simply from opposing other people’s pork barrels? A good illustration of this is Congressional testimony. Out of an average of 16 witnesses, there are typically 0.5 opponents of the proposal. Yes, that means that half of all proposals have zero hostile witnesses. One makes political “profit” by harming politically weak groups in order to favor politically strong ones. It is no wonder that the proponents of regulation always speak more loudly than its enemies.

I am not proposing the crude materialist doctrine that people support whatever ideas monetarily benefit them. There are too many counter-examples. Nevertheless, pecuniary interest is a clear factor behind regulation, and this factor is one of the chief causes for the pervasive double standard regarding markets and government that most people accept as self-evident. It is true, of course, that most people who espouse this double standard do not have any financial interest in it. But most people pick up their ideas on issues from prominent public and private activists, and these activists usually do benefit from the laws that they impose.

7. Conclusion

The sole focus of this paper up to now has been efficiency, both allocative and productive. Its conclusion is that free competition should be economists’ welfare ideal, and that there is every reason to think that real-life regulation always tends to make things worse. But what is so great about efficiency anyway?

All that economic efficiency means is that whatever preferences consumers have get satisfied as well as possible. But what if consumers have bad preferences? Wouldn’t inefficiency be better in that case? Here lies

the only real market failure; but it is not an economic failure. It is a moral failure.

Some economists like Demsetz, Stigler, and Posner have implausibly argued that wealth-maximization just is the same thing as morality. This is absurd. If Hannibal Lecter will pay more to eat orphans than the orphans will pay to not be eaten, should we hand over the children to him? A system’s efficiency is not a reason to support it; indeed, the sole reason for supporting something must be the intrinsic value of the end which it achieves.

What exists then is an obvious logical gap between concluding that free competition maximally satisfies consumer preferences and concluding that free competition is the morally right system. Can this gap be bridged, and if so, how?

My short answer is as follows. The best society of all would be one composed of good people who would all have good preferences whose efficient satisfaction we should favor. So in this society we should surely choose free competition. But what about less perfect societies such as our own? I apprehend that the right way to perfect our society is through voluntary, rational persuasion; for of what value is a person who speaks and acts rightly if he or she does it out of fear of punishment, or forced ignorance, denied any opportunity to judge right and wrong with his or her own intellect? That this process is slower and less sure than repression is irrelevant; for it is also the only route to genuine moral advancement. Liberty, then, is a necessary though not sufficient condition of a good society populated by good people; and this, I think, shows why free competition (which is the application of liberty to the field of production and trade) is better than all the alternatives. In any case, it is precisely in the most evil societies that the value of liberty becomes greatest. The reason is that authoritarian societies run by evil people make a good life impossible for everyone, good and bad alike. But a free society lets good individuals create regions of autonomy for themselves no matter how debased most people are, allowing good people to profit from their virtues and bad people to bear the harm of their vices. This practical demonstration of the contrast between virtue and vice would more improve the human character than any coercive social experiment.

NOTES

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