



## **Applicability of the Theories of Monopoly and Perfect Competition -Some Implications**

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### **ABSTRACT**

This paper addresses the concern that monopolies arise naturally out of the free market. An attempt is made to compare and contrast two theories of monopoly economic and political monopoly that this is not true. This paper further demonstrates that the two theories of monopoly have their separate roots in two opposite theories of competition: perfect competition and competition as rivalry. Hence the paper discusses only one of these theories of competition accurately describes the nature of competition in an economy. Besides, the paper also delves the two theories of competition and monopolies are derived from collectivist and individualist political philosophy. It illustrates how perfect competition and economic monopoly have undermined economists' understanding of the actual nature of both competition and monopoly. After investigating these theories, an attempt is made to apply them to show how one can come to very different conclusions about when monopoly power does and does not exist.

**Keywords :** Monopoly, Perfect Competition, firm, industry, government, egalitarianism, etc.

### **1. INTRODUCTION**

It is often claimed that a free market leads to large firms gaining monopoly power and being able to restrict the output of the goods they produce to raise their prices (James, et al., 2000: 126-127). This alleged monopoly power is said to lead to greater economic inefficiency, a lower productive capability, and a lower average standard of living. Hence, it is said the government must step in to restore competition. In this paper, an attempt is made to show this claim is based on an invalid view of competition and monopoly. The free market allows for the maximum amount of competition that is possible in any industry and that deviating from a free market, with some form of government intervention in the name of allegedly increasing competition, actually decreases the intensity of competition that exists in the economy and thus decreases the level of economic efficiency, the productive capability, and the standard of living (Arnold. Roger A., 2001).

An attempt is made in this paper to compare and contrast two theories of monopoly perfect competition. This paper further demonstrates that the two theories of monopoly have their separate roots in two opposite theories of competition: perfect competition and competition

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as rivalry. Hence the paper discusses only one of these theories of competition accurately describes the nature of competition in an economy.

The paper has been divided into six sections. The second section deals with the economic versus political economy. Section three discusses perfect completion and its applicability in the present situation. Section four devoted to compare and contrast the political monopoly and perfect completion. Section five delves the barriers of entry into the market with a special focus on Patents, Copyrights, and Trademarks and also economies of scale among other things. The final section provides findings and concluding remarks.

## **2. ECONOMIC VERSUS POLITICAL MONOPOLY**

There are two concepts of monopoly that exist and they do not provide an equally good understanding of monopoly. The concept accepted by most economists today is the one that is deficient, and it is the acceptance of this invalid concept of monopoly that leads them to (incorrectly) believe that monopolies arise out of the free market. The concept of monopoly accepted by most economists today is known as the economic concept of monopoly. This concept says a monopoly exists when there is only one supplier of a good, with no close substitutes, in a given geographic region (Arnold, 2001:528), (Boulding, Kenneth E., 1996). The concept that provides a sound understanding of monopoly is known as the political concept of monopoly. This says that monopolies arise from the government's initiation of physical force to reserve a market or a portion of a market to one or more sellers (Chamberlin, E.H., 1960).

The economic concept of monopoly focuses on the number and size of firms in an industry.

It says the smaller the number of firms in an industry, and the larger those firms are, the more monopoly power that exists in that industry. It says monopoly power can arise naturally out of the market simply by firms becoming big (Richard, 1973; Schotter, 1997).

The political concept focuses on the restriction of competition by the government and says monopoly power can be held by many small producers against just one or a few large producers, or can be held by one large producer against other, smaller producers. The political concept says as long as a firm is being protected from competition by the government no matter what its size then that firm has monopoly power.

The main problem with the economic concept of monopoly is that it groups together firms that have achieved their dominant positions through voluntary trade i.e., by outdoing their rivals with firms that have achieved their dominant positions through the government's initiation of physical force i.e., by the government protecting them from competition. It is therefore based on the characteristic that these two types of firms both have a large market share in their industry. By doing this, it ignores how these firms came to acquire their dominant positions.

These two situations are exact opposites and should not be grouped together because the ways in which the companies have achieved their dominant positions are diametrically opposed to each other. The case based on voluntary trade is a part of competition and the one based on the government's use of force is an act of restricting competition. That is, the former case is a part of the rivalries act of firms building a product and trying to get individuals to voluntarily buy it. This is what competition in an economic system is all about. Anything that results from this process does not create monopoly power because it is part of the competitive process. The latter act prevents one or more firms from building and selling a product. This is why it represents a restriction of competition and therefore creates monopoly power.

Because monopoly is a concept used to identify situations where competition is absent or restricted, one cannot use it to identify situations that are the result of competition, such as when firms achieve dominant positions by producing and selling better products

(Chamberlin, 1960; Boulding, 1966). By grouping together situations that are the result of competition with situations that are the result of restrictions of competition, the economic concept obliterates a crucial difference and leads people to inappropriately identify when monopolies do or do not exist i.e., when competition is actually restricted or not.

Having a large market share is not essential to whether a firm has monopoly power or not. However, because the economic concept focuses on this characteristic as if it is the essential characteristic of monopoly it leads to arbitrary and contradictory conclusions as to whether firms are monopolies or not. The economic concept leads to claims that no firm is a monopoly and all firms are monopolies, depending on how broadly or narrowly one defines a good (Samuelson, 1953; McConnell, and Stanley, 1996). Further, it leads to claims that a firm both is and is not a monopoly at the same moment in time.

For example, if one defines a good by brand names (such as Coca cola or Pepsi), every firm is a monopoly because each firm is the only seller of its brand-name product. However, if one broadens his definition of a good and, continuing with the same example, considers the good "soft drinks" or, expanding it further to "liquid beverage," then neither Coca cola nor Pepsi is a monopoly and no other firm is a monopoly either. This is the case because all producers of beverages compete with each other. Producers of soft drinks, juices, bottled water, coffee, tea, and even tap water compete against each other (Reisman, 1996: 390). This example can be applied to any industry.

Depending on how one defines a product, what one person says is a monopoly and what another says is a monopoly could be quite different. One could say that no business is a monopoly and all businesses are monopolies, or that a firm both is and is not a monopoly, all at the same time. Because of this, the economic concept becomes meaningless. It is a subjective and arbitrary concept because it can be used in an arbitrary manner to say whether a monopoly exists or not.

The arbitrary nature of the economic concept of monopoly has been illustrated eloquently in the Microsoft antitrust case. Here, different economists have given contradictory answers to the question of whether Microsoft is a monopolist. They do so based on their different opinions concerning what the relevant market is for Microsoft's products and therefore how large of a market share Microsoft has (Maurice, et al., 2002: 482-483). There is no confusion, contradictions, or inappropriate classifications based on the political concept. Any producer or producers that are protected from competition by the government are monopolists (whether through government issued licenses, tariffs, quotas, exclusive franchises, subsidies, or government owned enterprises). This is a good concept because it is not subjective and arbitrary who is a monopolist; it is objective. Firms cannot simultaneously be and not be monopolies based on the political concept. They either have monopoly power or they do not.

Based on a proper understanding of what a monopoly is; one can say that Microsoft does not have any monopoly power. It is not protected from competition in any way by the American government. More significantly, one can say that monopolies do not arise naturally out of the market. The only time a monopoly exists is when the government interferes with the market using the initiation of force to protect some firm or firms from competition. A discussion has been made below that it is only when a firm possesses monopoly power based on the political concept that the standard negative effects associated with monopoly arise. Only then will a firm be able to restrict its output to raise its price. Only then will it produce in a much more inefficient manner. This is so because only then is competition actually restricted.

### **3. PERFECT COMPETITION**

"Economic monopoly" stems from the theory of competition that most economists accept

and is known as "perfect competition." The five standard characteristics of a "perfectly competitive" industry are insignificant barriers to entry and exit, a large number of small producers, homogenous products, "perfect information," and price taking firms (Arnold, 2001: 501). It helps in understanding any concept to concretize what the concept means or implies in reality. By doing this, one can see whether a concept makes sense based on the facts or whether a concept is absurd and meaningless. By concretizing "perfect competition" the paper shows that the latter applies to it (Hayek, F.A 1948).

First, consider the idea that all products must be the same to have perfect competition. What does this imply? It implies that there is no competition with respect to differentiation in quality and style (Marshall, 1920). This means that if perfect competition is to exist; firms cannot try to make their product different from or better than their rivals' products. Therefore, this concept of "competition" actually excludes one major aspect of competition. Furthermore, there would be no variety in the types of goods that exist. As one can easily observe in real economies, actual competition has the exact opposite effect.

Second, what about the idea that an industry must have a large number of small firms in order to be considered perfectly competitive? This excludes competition by companies to drive their costs down and gain a competitive edge over their rivals by achieving economies of scale. This is probably one of the most intense aspects of actual competition in the marketplace. If every industry was composed of a large number of small firms, costs in many industries would be higher, and this would lead to a lower productive capability and standard of living. Again, this is the exact opposite result that is achieved by actual competition.

Third, what about the idea that an industry must have insignificant barriers to entry and exit to be perfectly competitive? This ignores a crucial distinction between two types of barriers to entry that one must consider when assessing whether competition exists: natural and government imposed barriers. Natural barriers, such as high capital requirements, brand loyalty, or knowledge about how to produce a good, are a part of competition and voluntary trade (Kelvin, 1974; Kautsoyiannis, 1979). For example, a firm gains customer loyalty by producing a product that customer like enough that they will not easily switch to a different brand.

The Government imposed barriers impede competition and voluntary trade and are achieved through the initiation of physical force. They are achieved by the government forcibly preventing some firms from competing (such as through exclusive government franchises), making it harder for some to compete (such as through tariffs, quotas, and licenses), or by providing an artificial advantage to some companies (through subsidies). These types of barriers restrict competition.

By ignoring the fundamental distinction between these two types of barriers to entry, perfect competition lumps these two fundamentally different things together and says when any barriers exist competition is lessened. This means it lumps together industries such as the Hyderabad City taxi industry, which has substantial government barriers, and the computer hardware manufacturing business, which has high capital requirements, and says both of these industries lack competition because of these barriers. However, this could not be farther from the truth. The computer business is extremely competitive because of the high capital requirements, and thus low costs, that have been achieved in that industry. Achieving these low costs has been a part of the competitive process in this industry.

Fourth, what about the idea that perfect information must exist for an industry to be perfectly competitive? This is blatantly absurd. Perfect information implies that humans must be omniscient in order for competition to exist. However, part of competition is competition concerning information and knowledge. Competition to gain knowledge about what methods of production to use, competition to gain knowledge about customers (such as through focus group studies), and competition among firms to disseminate information

about themselves (such as through advertising) are all important aspects of actual competition.

By assuming that we must have perfect information to have an allegedly perfect form of competition, again, a major component of competition is excluded. For example, countries like India where almost half of the people are illiterate, the concept of perfect information may not be applicable.

Fifth, what about the idea that perfectly competitive firms are price takers? This characteristic ignores the fact that many firms set their prices based on costs of production they can achieve. Firms compete intensely by continuously driving their costs down, setting a lower price, and thus gaining a competitive advantage over their rivals. Hence, in requiring firms to be price takers, perfect competition excludes another aspect of actual competition.

Perfect competition, as economists often admit, does not exist anywhere in reality (Chamberlin, 1960). Sometimes it is claimed that agricultural industries, such as wheat farming, come closest to being perfectly competitive because the products are close to being identical and the farmers take whatever price they can get for their products in the commodity markets. However, even these industries fail to meet the standard in many ways. First, it takes a large amount of capital to get into the modern agricultural business (think of all the land and sophisticated machinery one must possess) not like the one in most of the Indian traditional agricultural business. Second, perfect information most certainly does not, and cannot, exist in farming or any other industry (think of all the knowledge about agriculture one must have to be a successful farmer). Third, because of the high capital and knowledge requirements needed to get into the farming business, significant barriers to enter the business exist.

As F. A. Hayek recognized, perfect competition is not a form of competition at all; it actually means the absence of all competition (Hayek, 1948: 92 - 96). Under perfect competition, there is no competition to differentiate one's product, no competition to gain economies of scale and drive one's costs down, and no competition to gain or disseminate information. It is not a good concept because it has nothing to do with the actual nature of competition and exists no where in reality. In fact, a good concept of competition is one based on rivalry. This says "to compete" one must try and outdo one's competitors in production and voluntary trade. It means a firm tries to differentiate its product, drive its costs down and set a lower price, advertise, and drive its competitors out of business by getting customers to voluntarily switch to its product. This provides one with a good understanding of how competition actually takes place in an economic system (Kelvin, 1974; Kautsoyiannis, 1979).

How does this relate to the discussion on monopoly? If one accepts that competition is most intense with a large number of small producers producing identical products, and so forth, then monopoly exists when there is only one producer of a good with no close substitutes (i.e., the economic concept of monopoly). In order to reject this invalid concept of monopoly, one must also reject perfect competition. Likewise, to fully embrace a proper understanding of monopoly political monopoly one must have a proper understanding of competition. That is, one must understand the competition that takes place in an economic system is a rivalrous process that occurs between producers who attempt to get people to voluntarily purchase their products. The opposite of this is when competition viz., voluntary trade is restricted through the initiation of physical force. This is identified by the political concept of monopoly.

#### **4. THE PHILOSOPHICAL BASIS OF PERFECT COMPETITION AND ECONOMIC MONOPOLY**

The philosophical basis for why many economists accept the validity of perfect competition and economic monopoly is provided by egalitarianism and collectivism. Egalitarianism

is the belief that people should be the same in all respects. We should all have the same amount of income, the same opportunities, abilities, etc. For example, if X possess some greater ability than others, then the X should some how "give up" some of his/her ability and "give it" to others. Maybe, the egalitarians might say, one should hold back so as not to make others look worse and feel bad about their lack of talent. Or maybe one should spend less time developing his/her own talent and more time helping less talented individuals develop their skills. Others should do the same in the areas where they have superior ability. The result is a society where everyone is equally talented, and no one is superior to any other person at anything. This idea may not be applicable to the country like India where there are diversified cultures and caste system.

The type of world that would exist if everyone was exactly the same is the bizarre world of perfect competition. For instance, under perfect competition, no one would have an advantage in the information he possesses because producers would all have perfect information. Likewise, everyone would produce identical products, no one would have a cost advantage because firms would all be the same small size, and all businesses would receive the same price that prevails in the market. Perfect competition is an egalitarian ideal (Marshall, 1920). And if this is the competitive ideal, according to egalitarianism, then being different (especially superior) in any way would create some element of (economic) monopoly. The differences between competitors stand in opposition to egalitarianism. Therefore, if one takes egalitarianism seriously, he will end up believing it is beneficial to have all competitors exactly the same, and consider it harmful when one competitor has an advantage, in any way, over the rest.

The problem is that egalitarianism is not a proper standard by which to judge anything. Economically, implementing egalitarian policies would lead to a lower average standard of living by sacrificing the productive to the unproductive through such schemes as the progressive income tax and the inheritance tax. Morally, such a standard is an abomination because it stands in opposition to the requirements of human life. It prevents the individual from being the beneficiary of his own action by forcing the individual to be a rightless servant to the needs of others (James D. Gwartney, 2000). If people are to survive, they must be free to pursue their rational self-interests; they must not be sacrificed to the needs and whims of others.

Perfect competition is an attempt to wipe aside the individual's role in competition. It is competition built on a thoroughly collectivist base. It says individual differences should play no role in competition and, in fact, any differences are to be condemned as alleged monopoly power. What this theory forgets is that competition occurs between individuals.

Just as economic monopoly and perfect competition are based on egalitarianism and collectivism, political monopoly and competition as rivalry are based on individualism. These latter fully recognize the role of the individual in competition by recognizing that competition takes place between individuals. They recognize that individuals possess different skills and financial resources and that these differences are a part of the competitive process. They recognize that each individual has a right to his own life and should live it to further his own well being and happiness, which includes outdoing others in the rivalrous process of economic competition. Ultimately, to reject perfect competition and economic monopoly, one must reject egalitarianism and collectivism. Likewise, to embrace a proper theory of competition and monopoly (competition as rivalry and political monopoly), one must embrace an individualist political philosophy.

## **5. BARRIERS TO ENTRY**

To gain a better understanding of competition and monopoly, it will help to go through some specific examples to see what actually does and does not constitute a monopoly. This paper discusses a few specific types of barriers to entry and assesses them based on



the political concept of monopoly.

### **Patents, Copyrights, and Trademarks**

It must be stressed that monopoly power exists only when the government initiates physical force to reserve a market or a portion of a market for one or more sellers. Based on this, patents, copyrights, and trademarks do not create monopolies, even though they are often thought to do so based on the economic concept of monopoly simply because they create an entry barrier (Reisman, 1996: 388-389). Patents, copyrights, and trademarks protect intellectual property from being used by others without the owner's consent. Just as the government must use retaliatory force to protect, say, a farmer's equipment or a manufacturer's machinery (i.e., physical property) from being stolen by thieves, it must do the same with intellectual property (such as protecting the use of an invention with a patent, the use of an author's book with a copyright, and the use of brand names and logos with trademarks). Protecting patented devices, copyrighted material, and trademarks is similar to protecting any other property that a person owns (Kautsoyiannis, A., 1997).

The protection of patents, copyrights, and trademarks helps to increase efficiency, quality, and the supply of goods by making it possible for those who create wealth or develop a good reputation to profit from it. Patents provide an incentive to develop new inventions or make improvements on old ones. Copyrights provide an incentive to produce higher quality written matter. Trademarks provide a strong incentive to maintain quality by making it possible for a company to gain from the reputation it has built. These are the exact opposite effects of an actual monopoly.

Actual monopolies decrease economic efficiency, quality, and the supply of goods because they violate individual rights by protecting producers from competition. Economic competition can only take place within the context of voluntary trade, and the latter can only exist when people are protected from the initiation of physical force (i.e., when individual rights are protected) Simpson, 2005: 7-9). This is what patents, copyrights, and trademarks do; they are a part of what makes competition possible.

Based on a proper understanding of monopoly, not protecting patents, copyrights, and trademarks would constitute a monopoly. It would be the establishment of a monopoly of the dull and incompetent by forcibly depriving the intelligent and competent of the benefit of their intelligence and competence. Such a situation would constitute an act of the initiation of force by the dull and incompetent, sanctioned by the government, to gain access to things they could have never created and thus to obtain a portion of a market they could have never gained access to on their own through voluntary trade.

### **Economies of Scale**

Gaining efficiencies through economies of scale does not constitute a monopoly, although it is often believed to do so based on the economic concept of monopoly (Reisman, 1996: 376). Economies of scale are achieved through intense competition to drive costs down through the accumulation of capital, the acquisition of knowledge, and the efficiencies in production and improvements in quality that can be gained based on this foundation. Potential entrants to an industry, if they want to compete successfully, must be able to achieve the low costs of production that those currently in the industry have already achieved.

If the government provided new firms with the capital and knowledge to compete (this latter, perhaps, by requiring existing companies to provide their trade secrets to new entrants), this would constitute a monopoly of those who have not earned the capital and knowledge against those who have. The government would be initiating force against existing companies to force them to provide newcomers with their trade secrets, or against taxpayers to provide newcomers with funds to purchase capital. In either case, this would

lead to a lower productive capability. It would either take away the incentive for firms to acquire more knowledge (since it is likely firms would be forced to provide that knowledge to newcomers), or it would take away the financial incentive to be efficient and produce products that consumers demand (since newcomers could obtain funds from taxpayers instead of having to raise funds from investors through voluntary means).

### **Sole Control of a Resource**

Gaining sole control of a resource does not constitute a monopoly if it is achieved through voluntary trade. It is to be recalled that, an actual monopoly does not depend on having only one producer of a good; it depends on whether competition is forcibly restricted. If someone had the foresight to buy up the total supply of a resource, this is an achievement that is based on the ability of the person buying the resource. Such an acquisition is based on voluntary trade and does not constitute a restriction of competition (in fact, it is a part of competition). Further, recognizing and developing uses for a particular resource take great ability. Such activities help to increase the productive capability of the economic system. This can be seen in the case of the aluminum industry where, up through the mid-twentieth century, Alcoa (American industry) controlled virtually the entire supply of land that contained Bauxite ore, a chemical from which aluminum is made. Without Alcoa's efforts to discover better ways to produce and use aluminum, the development of the aluminum industry, and industries that are heavily dependent on aluminum (such as the aircraft industry), would probably have developed in a much slower fashion.

Taking away resources from someone, if acquired through voluntary trade, would violate individual rights and constitute a monopoly. It would be a monopoly of those who did not have the means and ability to acquire the resources through voluntary trade against those who did. This would decrease economic efficiency and the productive capability of the economic system because firms would have less incentive and ability to acquire and develop uses for resources in the future.

### **Network Effects**

Network effects are said to lead to monopoly power because they create switching costs and allegedly lead to "lock-in effects" and "path dependency." For instance, it is often said that people can get locked in to an inferior standard or product just because it was the first one to gain a significant market share. Therefore, it is claimed that it may be impossible even for superior goods to unseat an inferior "network good." This has been alleged to occur with such goods as the typewriter, the VCR, computer operating systems, and computer software, among others.

Even if lock-in and path dependency existed, they would not create a monopoly as long as the widely-accepted standard was established based on voluntary trade. However, Stan Liebowitz and Stephen Margolis have shown that lock-in and path dependency do not exist. For instance, with respect to the typewriter it is claimed that the allegedly inferior QWERTY keyboard (named for the letters on the top left-hand side of the keyboard) has maintained its popularity simply because it was the first one to be widely used and that an allegedly superior late comer, the DSK (or Dvorak) keyboard, has not been widely used because of the early success of the QWERTY keyboard. The DSK was said to be superior because the arrangement of the keys allegedly made it possible to type faster. The claim by supporters of the "network effect" monopoly argument is that no one learns how to use the DSK keyboard because DSK keyboards are hard to find and DSK keyboards are hard to find because no one learns how to use them. However, a detailed study of the history of the keyboard shows (1) that the QWERTY keyboard faced intense competition during the late-nineteenth century, when the battle occurred to establish the standard, and it emerged from that competition as one of the better keyboards, and (2) that the DSK keyboard offers no clear advantage over the QWERTY keyboard. The lock-in/path dependency tales in other industries fall victim to a similar fate (Kelvin Lancaster, 1974).



With regard to switching costs, although they do exist in some industries, they are simply a part of the competitive process with which firms must deal. They are facts of economic reality that are not to be bewailed simply because they are not in agreement with one's arbitrary desires. One cannot wish an aspect of the nature of reality (including the nature of competition) out of existence. One can only accept it. The people who bemoan the nature of competition and wish for an alternative (whether "perfect competition," or the absence of switching costs) are guilty of attempting to rewrite reality. They think that reality is deficient simply because it is not as they wish it to be. They think it is perfectly valid to pine for the elimination of something that cannot be erased (i.e., to wish for an "alternative" reality), (Liebowitz, Stan J., 1999).

If the government was to interfere to help a firm overcome switching costs, this would create monopoly power, even if the firm it was helping had a better product and would eventually dominate the market without the government's help. The government might initiate physical force against taxpayers to force them to subsidize the firm with the new product, or the government might somehow restrict the competitive ability of existing firms. While the existence of switching costs as such does not lead to inefficiency and the acceptance of inferior standards, government intervention to help firms overcome switching costs does. For example, if firms are subsidized, it causes the firms to be more inefficient because they can rely on funds expropriated from taxpayers to cover their costs. Hence, they will less likely be concerned with keeping their costs down. In addition, help from the government for companies with inferior products will help those companies to achieve a greater market share than they otherwise would be able to. Also, when the government helps firms with superior products, this creates a monopoly by helping those firms to achieve a dominant position in a quicker fashion than they otherwise would be able to through the competitive process.

## **6. FINDINGS AND CONCLUSIONS**

The economic concept of monopoly focuses on the number and size of firms in an industry. It says the smaller the number of firms in an industry, and the larger those firms are exist in that industry. The industry must have a large number of small firms in order to be considered perfectly competitive? This excludes competition by companies to drive their costs down and gain a competitive edge over their rivals by achieving economies of scale. The main problem with the economic concept of monopoly is that it groups together firms that have achieved their dominant positions through voluntary.

Firms compete intensely by continuously driving their costs down, setting a lower price, and thus gaining a competitive advantage over their rivals. The high capital and knowledge requirements needed to get into the farming business, significant barriers to enter the business exist.

Economic monopoly and perfect competition are based on egalitarianism and collectivism, political monopoly and competition as rivalry are based on individualism. Monopoly power exists only when the government initiates physical force to reserve a market or a portion of a market for one or more sellers. Based on this, patents, copyrights, and trademarks do not create monopolies.

The economic concept of monopoly focuses on the number and size of firms in an industry. As one can see, monopolies are not created by the free market. They are created only by government intervention into the free market; they are created when the government gives some firm(s) special privileges over others through the initiation of physical force. Gaining sole control of a resource does not constitute a monopoly if it is achieved through voluntary trade. Taking away resources from someone would violate individual rights and constitute a monopoly. A free market economy is intensely competitive, and is typically more so the larger the firms in an industry are and the fewer the number of firms that exist in an industry.

In perfect competition, firms cannot try to make their product different from or better than their rivals' products. The idea of perfect information must exist for an industry to be perfectly competitive is blatantly absurd.

## **7. ENDNOTES**

The analysis in this paper follows that in Brian P. Simpson (2005). *Markets Don't Fail!* Lanham, MD: Lexington Books, pp. 31-33 and 37-53.

For a typical exposition of this concept, see Roger A. Arnold, *Economics*, 5th ed. (Cincinnati, OH: South-Western College Publishing, 2001), p. 528.

Discussion of the political and economic concepts of monopoly is based on George Reisman, *Capitalism: A Treatise on Economics* (Ottawa, IL: Jameson Books, 1996), pp. 376-377 and 389-392.

The critique of perfect competition in this paper based on F.A. Hayek, *Individualism and Economic Order* (Chicago: The University of Chicago Press, 1948), pp. 92-106 and Reisman, pp. 430-432.

On why egalitarianism is not a proper standard by which to judge anything, and on the morally destructive nature of egalitarianism in general, see Ayn Rand, *The New Left: The Anti-Industrial Revolution* (New York: Signet, 1971), pp. 152-186. Further, on the economically destructive nature of egalitarianism, see Reisman, pp. 145-146.

There are some differences between protecting intellectual property and physical property that was not discussed here. For instance, there are time limits on the protection of some intellectual property (such as patents and copyrights), while there are none on physical property. For a discussion on why this is necessary, see Ayn Rand, *Capitalism: The Unknown Ideal* (New York: Signet, 1967), pp. 130-134.

See for further details, a carefully researched book by Stan J. Liebowitz and Stephen E. Margolis titled *Winners, Losers, & Microsoft: Competition and Antitrust in High Technology*, (Oakland, CA: The Independent Institute, 1999), pp. 11-14, 19-46, 120-129, and 163-200. This book dispels many of the fallacies put forward by the "lock-in" and "path-dependency" mongers.

For more on the fallacy of rewriting reality, see Ayn Rand, *Philosophy: Who Needs It* (New York: Signet, 1982), p. 30 and Leonard Peikoff, *Objectivism: The Philosophy of Ayn Rand*, (New York: Meridian, 1991), pp. 26-30.

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