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## The Myth of Natural Monopoly

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The very term "public utility" ... is an absurd one. *Every* good is useful "to the public," and almost every good ... may be considered "necessary." Any designation of a few industries as "public utilities" is completely arbitrary and unjustified.

— Murray Rothbard, *Power and Market* (<http://mises.org/resources/196/Power-and-Market-Government-and-the-Economy>)



Most so-called public utilities have been granted governmental franchise monopolies because they are thought to be "natural monopolies." Put simply, a natural monopoly is said to occur when production technology, such as relatively high fixed costs, causes long-run average total costs to decline as output expands. In such industries, the theory goes, a single producer will eventually be able to produce at a lower cost than any two other producers, thereby creating a "natural" monopoly. Higher prices will result if more than one producer supplies the market.

Furthermore, competition is said to cause consumer inconvenience because of the construction of duplicative facilities, e.g., digging up the streets to put in dual gas or water lines. Avoiding such inconveniences is another reason offered for government franchise monopolies for industries with declining long-run average total costs.

It is a myth that natural-monopoly theory was developed first by economists, and then used by legislators to "justify" franchise monopolies. The truth is that the monopolies were created decades before the theory was formalized by intervention-minded economists, who then used the theory as an *ex post* rationale for government intervention. At the time when the first government franchise monopolies were being granted, the large majority of economists understood that large-scale, capital-intensive production did *not* lead to monopoly, but was an absolutely desirable aspect of the competitive process.

The word "process" is important here. If competition is viewed as a dynamic,

rivalrous process of entrepreneurship, then the fact that a single producer happens to have the lowest costs *at any one point in time* is of little or no consequence. The enduring forces of competition — including potential competition — will render free-market monopoly an impossibility.

The theory of natural monopoly is also ahistorical. There is no evidence of the "natural-monopoly" story ever having been carried out — of one producer achieving lower long-run average total costs than everyone else in the industry and thereby establishing a permanent monopoly. As discussed below, in many of the so-called public-utility industries of the late 18th and early 19th centuries, there were often literally dozens of competitors.

## Economies of Scale During the Franchise Monopoly Era

During the late 19th century, when local governments were beginning to grant franchise monopolies, the general economic understanding was that "monopoly" was caused by government intervention, not the free market, through franchises, protectionism, and other means. Large-scale production and economies of scale were seen as a competitive virtue, not a monopolistic vice. For example, Richard T. Ely, cofounder of the American Economic Association, wrote that "large scale production is a thing which by no means necessarily signifies monopolized production."<sup>[1]</sup> John Bates Clark, Ely's cofounder, wrote in 1888 that the notion that industrial combinations would "destroy competition" should "not be too hastily accepted."[2]

<sup>(#note2)</sup>

Herbert Davenport of the University of Chicago advised in 1919 that only a few firms in an industry where there are economies of scale does not "require the elimination of competition,"<sup>[3]</sup> and his colleague, James Laughlin, noted that even when "a combination is large, a rival combination may give the most spirited competition"<sup>[4]</sup> Irving Fisher<sup>[5]</sup> and Edwin R.A. Seligman<sup>[6]</sup> both agreed that large-scale production produced *competitive* benefits through cost savings in advertising, selling, and less cross-shipping.

Large-scale production units unequivocally benefited the consumer, according to turn-of-the-century economists. For without large-scale production, according to Seligman, "the world would revert to a more primitive state of well being, and would virtually renounce the inestimable benefits of the best utilization of capital."<sup>[7]</sup> Simon Patten of the Wharton School expressed a similar view that "the combination of capital does not cause any economic disadvantage to the community. ... Combinations are much more efficient than were the small producers whom they displaced."<sup>[8]</sup>

Like virtually every other economist of the day, Columbia's Franklin Giddings viewed competition much like the modern-day Austrian economists do, as a dynamic, rivalrous process. Consequently, he observed that

competition in some form is a permanent economic process. ... Therefore, when market competition seems to have been suppressed, we should inquire what has become of the forces by which it was generated. We should inquire, further, to what degree market competition actually is suppressed or converted into other forms.<sup>[9]</sup>

In other words, a "dominant" firm that underprices all its rivals at any one point in time has not suppressed competition, for competition is "a permanent economic process."

David A. Wells, one of the most popular economic writers of the late 19th century, wrote that "the world demands abundance of commodities, and demands them cheaply; and experience shows that it can have them only by the employment of great capital upon extensive scale."<sup>[10]</sup> (#note10) And George Gunton believed that

concentration of capital does not drive small capitalists out of business, but simply integrates them into larger and more complex systems of production, in which they are enabled to produce ... more cheaply for the community and obtain a larger income for themselves. ... Instead of concentration of capital tending to destroy competition the reverse is true. ... By the use of large capital, improved machinery and better facilities the trust can and does undersell the corporation.<sup>[11]</sup> (#note11)

The above quotations are not a selected, but rather a comprehensive list. It may seem odd by today's standards, but as A.W. Coats pointed out, by the late 1880s there were only ten men who had attained full-time professional status as economists in the United States.<sup>[12]</sup> (#note12) Thus, the above quotations cover virtually every professional economist who had anything to say about the relationship between economies of scale and competitiveness at the turn of the century.

The significance of these views is that these men observed firsthand the advent of large-scale production and did not see it leading to monopoly, "natural" or otherwise. In the spirit of the Austrian School, they understood that competition was an ongoing process, and that market dominance was always necessarily temporary in the absence of monopoly-creating government regulation. This view is also consistent with my own research findings that the "trusts" of the late 19th century were in fact dropping their prices and expanding output faster than the rest of the economy — they were the most dynamic and competitive of all industries, not monopolists.<sup>[13]</sup> (#note13) Perhaps this is why they were targeted by protectionist legislators and subjected to "antitrust" laws.

The economics profession came to embrace the theory of natural monopoly after the 1920s, when it became infatuated with "scientism" and adopted a more or less engineering theory of competition that categorized industries in terms of constant, decreasing, and increasing returns to scale (declining average total costs). According to this way of thinking, engineering relationships determined market structure and, consequently, competitiveness. The meaning of competition was no longer viewed as a behavioral phenomenon, but an engineering relationship. With the exception of such economists as Joseph Schumpeter, Ludwig von Mises, Friedrich Hayek, and other members of the Austrian School, the ongoing *process* of competitive rivalry and entrepreneurship was largely ignored.

## How "Natural" Were the Early Natural Monopolies?

There is no evidence at all that at the outset of public-utility regulation there existed any such phenomenon as a "natural monopoly." As Harold Demsetz has pointed out:

Six electric light companies were organized in the one year of 1887 in New York City. Forty-five electric light enterprises had the legal right to operate in Chicago in 1907. Prior to 1895, Duluth, Minnesota, was served by five electric lighting companies, and Scranton, Pennsylvania, had four in 1906. ... During the latter part of the 19th century, competition was the usual situation in the gas industry in this country. Before 1884, six competing

companies were operating in New York City ... competition was common and especially persistent in the telephone industry ... Baltimore, Chicago, Cleveland, Columbus, Detroit, Kansas City, Minneapolis, Philadelphia, Pittsburgh, and St. Louis, among the larger cities, had at least two telephone services in 1905. [14] (#note14)

In an extreme understatement, Demsetz concludes that "one begins to doubt that scale economies characterized the utility industry at the time when regulation replaced market competition." [15] (#note15)



(<http://mises.org/store/Power-and-Market-P322.aspx>)

A most instructive example of the non-existence of natural monopoly in the utility industries is provided in a 1936 book by economist George T. Brown entitled "The Gas Light Company of Baltimore," which bears the misleading subtitle, "A Study of Natural Monopoly." [16] (#note16) The book presents

"the study of the evolutionary character of utilities" in general, with special emphasis on the Gas Light Company of Baltimore, the problems of which "are not peculiar either to the Baltimore company or the State of Maryland, but are typical of those met everywhere in the public utility industry." [17] (#note17)

The history of the Gas Light Company of Baltimore figures prominently in the whole history of natural monopoly, in theory and in practice, for the influential Richard T. Ely, who was a professor of economics at Johns Hopkins University in Baltimore, chronicled the company's problems in a series of articles in the *Baltimore Sun* that were later published as a widely-sold book. Much of Ely's analysis came to be the accepted economic dogma with regard to the theory of natural monopoly.

The history of the Gas Light Company of Baltimore is that, from its founding in 1816, it constantly struggled with new competitors. Its response was not only to try to compete in the marketplace, but also to lobby the state and local government authorities to refrain from granting corporate charters to its competitors. The company operated with economies of scale, but that did not prevent numerous competitors from cropping up.

"Competition is the life of business," the *Baltimore Sun* editorialized in 1851 as it welcomed news of new competitors in the gas light business. [18] (#note18) The Gas Light Company of Baltimore, however, "objected to the granting of franchise rights to the new company." [19] (#note19)

Brown states that "gas companies in other cities were exposed to ruinous competition," and then catalogues how those same companies sought desperately to enter the Baltimore market. But if such competition was so "ruinous," why would these companies enter new — and presumably just as "ruinous" — markets? Either Brown's theory of "ruinous competition" — which soon came to be the generally accepted one — was incorrect, or those companies were irrational gluttons for financial punishment.

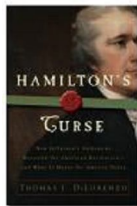
By ignoring the *dynamic* nature of the competitive process, Brown made the same mistake that many other economists still make: believing that "excessive" competition can be "destructive" if low-cost producers drive their less efficient rivals from the market. [20] (#note20) Such competition may be "destructive" to high-cost competitors, but it is beneficial to consumers.

In 1880 there were three competing gas companies in Baltimore who fiercely competed with one another. They tried to merge and operate as a monopolist in 1888, but a new competitor foiled their plans: "Thomas Aha Edison introduced the electric light which threatened the existence of all gas companies."<sup>[21]</sup> From that point on there was competition between both gas and electric companies, all of which incurred heavy fixed costs which led to economies of scale. Nevertheless, no free-market or "natural" monopoly ever materialized.

When monopoly did appear, it was solely because of government intervention. For example, in 1890 a bill was introduced into the Maryland legislature that "called for an annual payment to the city from the Consolidated [Gas Company] of \$10,000 a year and 3 percent of all dividends declared in return for the privilege of enjoying a 25-year monopoly."<sup>[22]</sup> This is the now-familiar approach of government officials colluding with industry executives to establish a monopoly that will gouge the consumers, and then sharing the loot with the politicians in the form of franchise fees and taxes on monopoly revenues. This approach is especially pervasive today in the cable TV industry.

Legislative "regulation" of gas and electric companies produced the predictable result of monopoly prices, which the public complained bitterly about. Rather than deregulating the industry and letting competition control prices, however, public utility regulation was adopted to supposedly appease the consumers who, according to Brown, "felt that the negligent manner in which their interests were being served [by legislative control of gas and electric prices] resulted in high rates and monopoly privileges. The development of utility regulation in Maryland typified the experience of other states."<sup>[23]</sup>

Not all economists were fooled by the "natural-monopoly" theory advocated by utility industry monopolists and their paid economic advisers. In 1940 economist Horace M. Gray, an assistant dean of the graduate school at the University of Illinois, surveyed the history of "the public utility concept,"



(<http://mises.org/store/Hamiltons-Curse-P534.aspx>)

including the theory of "natural" monopoly. "During the 19th century," Gray observed, it was widely believed that "the public interest would be best promoted by grants of special privilege to private persons and to corporations" in many industries.<sup>[24]</sup> This included patents, subsidies, tariffs, land grants to the railroads, and monopoly franchises for "public" utilities. "The final result was monopoly, exploitation, and political corruption."<sup>[25]</sup>

With regard to "public" utilities, Gray records that "between 1907 and 1938, the policy of state-created, state-protected monopoly became firmly established over a significant portion of the economy and became the keystone of modern public utility regulation."<sup>[26]</sup> From that time on, "the public utility status was to be the haven of refuge for all aspiring monopolists who found it too difficult, too costly, or too precarious to secure and maintain monopoly by private action alone."<sup>[27]</sup>

In support of this contention, Gray pointed out how virtually every aspiring monopolist in the country tried to be designated a "public utility," including the radio, real estate, milk, air transport, coal, oil, and agricultural industries, to name but a few. Along these same lines, "the whole NRA experiment may be regarded as an effort by big business to secure legal sanction for its monopolistic practices."<sup>[28]</sup> Those lucky industries that were able to be politically designated as "public utilities" also used the public utility concept to keep out the competition.

The role of economists in this scheme was to construct what Gray called a "confused rationalization" for "the sinister forces of private privilege and monopoly," i.e., the theory of "natural" monopoly. "The protection of consumers faded into the background."<sup>[29]</sup> (#note29)

More recent economic research supports Gray's analysis. In one of the first statistical studies of the effects of rate regulation in the electric utilities industry, published in 1962, George Stigler and Claire Friedland found no significant differences in prices and profits of utilities with and without regulatory commissions from 1917 to 1932.<sup>[30]</sup> (#note30) Early rate regulators did *not* benefit the consumer, but were rather "captured" by the industry, as happened in so many other industries, from trucking to airlines to cable television. It is noteworthy — but not very laudable — that it took economists almost 50 years to begin studying the actual, as opposed to the theoretical, effects of rate regulation.

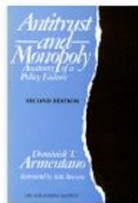
Sixteen years after the Stigler-Friedland study, Gregg Jarrell observed that 25 states substituted state for municipal regulation of electric power ratemaking between 1912 and 1917, the effects of which were to *raise* prices by 46 percent and profits by 38 percent, while reducing the level of output by 23 percent.<sup>[31]</sup> (#note31) Thus, municipal regulation failed to hold prices down. But the utilities wanted an even more rapid increase in their prices, so they successfully lobbied for state regulation under the theory that state regulators would be less pressured by local customer groups, than mayors and city councils would be.

These research results are consistent with Horace Gray's earlier interpretation of public utility rate regulation as an anticonsumer, monopolistic, price-fixing scheme.

## The Problem of "Excessive Duplication"

In addition to the economies of scale canard, another reason that has been given for granting monopoly franchises to "natural monopolies" is that allowing too many competitors is too disruptive. It is too costly to a community, the argument goes, to allow several different water suppliers, electric power producers, or cable TV operators to dig up the streets. But as Harold Demsetz has observed:

[T]he problem of excessive duplication of distribution systems is attributable to the failure of communities to set a proper price on the use of these scarce resources. The right to use publicly owned thoroughfares is the right to use a scarce resource. The absence of a price for the use of these resources, a price high enough to reflect the opportunity costs of such alternative uses as the servicing of uninterrupted traffic and unmarred views, will lead to their overutilization. The setting of an appropriate fee for the use of these resources would reduce the degree of duplication to optimal levels.<sup>[32]</sup> (#note32)



(<http://mises.org/store/Antitrust-and-Monopoly-Anatomy-of-a-Policy-Failure-P296.aspx>)

Thus, just as the problem with "natural" monopolies is actually caused by government intervention, so is the "duplication of facilities" problem. It is created by the failure of governments to put a price on scarce urban resources. More precisely, the problem is really caused by the fact that governments own the streets under which utility lines are placed, and that the impossibility of rational economic calculation within

socialistic institutions precludes them from pricing these resources appropriately, as they would under a private-property competitive-market regime.

Contrary to Demsetz's claim, rational economic pricing in this case is impossible precisely because of government ownership of roads and streets. Benevolent and enlightened politicians, even ones who have studied at the feet of Harold Demsetz, would have no rational way of determining what prices to charge. Murray Rothbard explained all this more than 25 years ago:

The fact that the government must give permission for the use of its streets has been cited to justify stringent government regulations of 'public utilities,' many of which (like water or electric companies) must make use of the streets. The regulations are then treated as a voluntary *quid pro quo*. But to do so overlooks the fact that governmental ownership of the streets is itself a permanent act of intention. Regulation of public utilities or of any other industry discourages investment in these industries, thereby depriving consumers of the best satisfaction of their wants. For it distorts the resource allocations of the free market. <sup>[33]</sup> (#note33)

The so-called "limited-space monopoly" argument for franchise monopolies, Rothbard further argued, is a red herring, for how many firms will be profitable in any line of production

is an institutional question and depends on such concrete data as the degree of consumer demand, the type of product sold, the physical productivity of the processes, the supply and pricing of factors, the forecasting of entrepreneurs, etc. Spatial limitations may be unimportant. <sup>[34]</sup> (#note34)

In fact, even if spatial limitations do allow only one firm to operate in a particular geographical market, that does not necessitate monopoly, for "monopoly" is "a meaningless appellation, unless monopoly price is achieved," and "all prices on a free market are competitive." <sup>[35]</sup> (#note35) Only government intervention can generate monopolistic prices.

The only way to achieve a free-market price that reflects true opportunity costs and leads to optimal levels of "duplication" is through free exchange in a genuinely free market, a sheer impossibility without private property and free markets. <sup>[36]</sup> (#note36) Political fiat is simply not a feasible substitute for the prices that are determined by the free market because rational economic calculation is impossible without markets.

Under private ownership of streets and sidewalks, individual owners are offered a tradeoff of lower utility prices for the temporary inconvenience of having a utility company run a trench through their property. If "duplication" occurs under such a system, it is because freely choosing individuals value the extra service or lower prices or both more highly than the cost imposed on them by the inconvenience of a temporary construction project on their property. Free markets necessitate neither monopoly nor "excessive duplication" in any economically meaningful sense.

## Competition for the Field

The existence of economies of scale in water, gas, electricity, or other "public utilities" in no way necessitates either monopoly or monopoly pricing. As Edwin Chadwick wrote in 1859, a system of competitive bidding for the services of private

utility franchises can eliminate monopoly pricing as long as there is competition "for the field."<sup>[37]</sup> (#note37) As long as there is vigorous bidding for the franchise, the results can be both avoidance of duplication of facilities and competitive pricing of the product or service. That is, bidding for the franchise can take place in the form of awarding the franchise to the utility that offers consumers the lowest price for some constant quality of service (as opposed to the highest price for the franchise).

Harold Demsetz revived interest in the concept of "competition for the field" in a 1968 article.<sup>[38]</sup> (#note38) The theory of natural monopoly, Demsetz pointed out, fails to "reveal the logical steps that carry it from scale economies in production to monopoly price in the market place."<sup>[39]</sup> (#note39) If one bidder can do the job at less cost than two or more,



(<http://mises.org/store/Against-Intellectual-Monopoly-P552.aspx>)

then the bidder with the lowest bid price for the entire job will be awarded the contract, whether the good be cement, electricity, stamp vending machines, or whatever, but the lowest bid price need not be a monopoly price. ... The natural monopoly theory provides no logical basis for monopoly prices.<sup>[40]</sup> (#note40)

There is no reason to believe that the bidding process will not be competitive. Hanke and Walters have shown that such a franchise bidding process operates very efficiently in the French water supply industry.<sup>[41]</sup> (#note41)

## The Natural-Monopoly Myth: Electric Utilities

According to natural-monopoly theory, competition cannot persist in the electric-utility industry. But the theory is contradicted by the fact that competition has in fact persisted for decades in dozens of US cities. Economist Walter J. Primeaux has studied electric utility competition for more than 20 years. In his 1986 book, *Direct Utility Competition: The Natural Monopoly Myth*, he concludes that in those cities where there is direct competition in the electric utility industries:

- Direct rivalry between two competing firms has existed for very long periods of time — for over 80 years in some cities;
- The rival electric utilities compete vigorously through prices and services;
- Customers have gained substantial benefits from the competition, compared to cities where there are electric utility monopolies;
- Contrary to natural-monopoly theory, costs are actually lower where there are two firms operating;
- Contrary to natural-monopoly theory, there is no more excess capacity under competition than under monopoly in the electric utility industry;
- The theory of natural monopoly fails on every count: competition exists, price wars are not "serious," there is better consumer service and lower prices with competition, competition persists for very long periods of time, and consumers themselves prefer competition to regulated monopoly; and
- Any consumer satisfaction problems caused by dual power lines are considered by



consumers to be less significant than the benefits from competition.<sup>[42]</sup> (#note42)

Primeaux also found that although electric utility executives generally recognized the consumer benefits of competition, they personally preferred monopoly!

Ten years after the publication of Primeaux's book, at least one state — California — is transforming its electric utility industry "from a monopoly controlled by a handful of publicly held utilities to an open market."<sup>[43]</sup> (#note43) Other states are moving in the same direction, finally abandoning the baseless theory of natural monopoly in favor of natural competition:<sup>[44]</sup> (#note44)

- The Ormet Corporation, an aluminum smelter in West Virginia, obtained state permission to solicit competitive bids from 40 electric utilities;
- Alcan Aluminum Corp. in Oswego, New York has taken advantage of technological breakthroughs that allowed it to build a new power generating plant next to its mill, cutting its power costs by two-thirds. Niagara Mohawk, its previous (and higher-priced) power supplier, is suing the state to prohibit Alcan from using its own power;
- Arizona political authorities allowed Cargill, Inc. to buy power from anywhere in the West; the company expects to save \$8 million per year;
- New federal laws permit utilities to import lower-priced power, using the power lines of other companies to transport it;
- Wisconsin Public Service commissioner Scott Neitzel recently declared, "free markets are the best mechanism for delivering to the consumer ... the best service at the lowest cost";
- The prospect of future competition is already forcing some electric utility monopolies to cut their costs and prices. When the TVA was faced with competition from Duke Power in 1988, it managed to hold its rates steady without an increase for the next several years.

The potential benefits to the US economy from demonopolization of the electric utility industry are enormous. Competition will initially save consumers at least \$40 billion per year, according to utility economist Robert Michaels.<sup>[45]</sup> (#note45) It will also spawn the development of new technologies that will be economical to develop because of lower energy costs. For example, "automakers and other metal benders would make much more intensive use of laser cutting tools and laser welding machines, both of which are electron guzzlers."<sup>[46]</sup> (#note46)

## The Natural-Monopoly Myth: Cable TV

Cable television is also a franchise monopoly in most cities because of the theory of natural monopoly. But the monopoly in this industry is anything but "natural." Like electricity, there are dozens of cities in the United States where there are competing cable firms. "Direct competition ... currently occurs in at least three dozen jurisdictions nationally."<sup>[47]</sup> (#note47)

The existence of longstanding competition in the cable industry gives the lie to the notion that that industry is a "natural monopoly" and is therefore in need of franchise monopoly regulation. The cause of monopoly in cable TV is government regulation, not economies of scale. Although cable operators

*"The theory of natural monopoly is an economic fiction. No such thing as a 'natural' monopoly has ever existed."*

complain of "duplication," it is important to keep in mind that "while over-building an existing cable system can lower the profitability of the incumbent operator, it unambiguously improves the position of consumers who face prices determined not by historical costs, but by the interplay of supply and demand."<sup>[48]</sup> (#note48)

Also like the case of electric power, researchers have found that in those cities where there are competing cable companies prices are about 23 percent below those of monopolistic cable operators.<sup>[49]</sup> (#note49) Cablevision of Central Florida, for example, reduced its basic prices from \$12.95 to \$6.50 per month in "duopoly" areas in order to compete. When Telestat entered Riviera Beach, Florida, it offered 26 channels of basic service for \$5.75, compared to Comcast's 12channel offering for \$8.40 per month. Comcast responded by upgrading its service and dropping its prices.<sup>[50]</sup> (#note50) In Presque Isle, Maine, when the city government invited competition, the incumbent firm quickly upgraded its service from only 12 to 54 channels.<sup>[51]</sup> (#note51)

In 1987 the Pacific West Cable Company sued the city of Sacramento, California on First Amendment grounds for blocking its entry into the cable market. A jury found that "the Sacramento cable market was not a natural monopoly and that the claim of natural monopoly was a sham used by defendants as a pretext for granting a single cable television franchise ... to promote the making of cash payments and provision of 'in-kind' services ... and to obtain increased campaign contribution."<sup>[52]</sup> (#note52) The city was forced to adopt a competitive cable policy, the result of which was that the incumbent cable operator, Scripps Howard, dropped its monthly price from \$14.50 to \$10 to meet a competitor's price. The company also offered free installation and three months free service in every area where it had competition.

Still, the big majority of cable systems in the U.S. are franchise monopolies for precisely the reasons stated by the Sacramento jury: they are mercantilistic schemes whereby a monopoly is created to the benefit of cable companies, who share the loot with the politicians through campaign contributions, free air time on "community service programming," contributions to local foundations favored by the politicians, stock equity and consulting contracts to the politically well connected, and various gifts to the franchise authorities.

In some cities, politicians collect these indirect bribes for five to ten years or longer from multiple companies before finally granting a franchise. They then benefit from part of the monopoly rents earned by the monopoly franchisee. As former FCC chief economist Thomas Hazlett, who is perhaps the nation's foremost authority on the economics of the cable TV industry, has concluded, "we may characterize the franchising process as nakedly inefficient from a welfare perspective, although it does produce benefits for municipal franchiser."<sup>[53]</sup> (#note53) The barrier to entry in the cable TV industry is not economies of scale, but the political price-fixing conspiracy that exists between local politicians and cable operators.

## The Natural-Monopoly Myth: Telephone Services

The biggest myth of all in this regard is the notion that telephone service is a natural monopoly. Economists have taught generations of students that telephone service is a "classic" example of market failure and that government regulation in the "public interest" was necessary. But as Adam D. Thierer recently proved, there is nothing at all "natural" about the telephone monopoly enjoyed by AT&T for so many decades; it was purely a creation of government intervention."<sup>[54]</sup> (#note54)

Once AT&T's initial patents expired in 1893, dozens of competitors sprung up. "By the end of 1894 over 80 new independent competitors had already grabbed 5 percent of total market share ... after the turn of the century, over 3,000 competitors

existed.<sup>[55]</sup> (#note55) In some states there were over 200 telephone companies operating simultaneously. By 1907, AT&T's competitors had captured 51 percent of the telephone market and prices were being driven sharply down by the competition. Moreover, there was no evidence of economies of scale, and entry barriers were obviously almost nonexistent, contrary to the standard account of the theory of natural monopoly as applied to the telephone industry.<sup>[56]</sup> (#note56)

The eventual creation of the telephone monopoly was the result of a conspiracy between AT&T and politicians who wanted to offer "universal telephone service" as a pork-barrel entitlement to their constituents. Politicians began denouncing competition as "duplicative," "destructive," and "wasteful," and various economists were paid to attend congressional hearings in which they somberly declared telephony a natural monopoly. "There is nothing to be gained by competition in the local telephone business," one congressional hearing concluded.<sup>[57]</sup> (#note57)

The crusade to *create* a monopolistic telephone industry by government fiat finally succeeded when the federal government used World War I as an excuse to nationalize the industry in 1918. AT&T still operated its phone system, but it was controlled by a government commission headed by the postmaster general. Like so many other instances of government regulation, AT&T quickly "captured" the regulators and used the regulatory apparatus to eliminate its competitors. "By 1925 not only had virtually every state established strict rate regulation guidelines, but local telephone competition was either discouraged or explicitly prohibited within many of those jurisdictions."<sup>[58]</sup> (#note58)

## Conclusions

The theory of natural monopoly is an economic fiction. No such thing as a "natural" monopoly has ever existed. The history of the so-called public utility concept is that the late 19th and early 20th century "utilities" competed vigorously and, like all other industries, they did not like competition. They first secured government-sanctioned monopolies, and *then*, with the help of a few influential economists, constructed an *ex post* rationalization for their monopoly power.


This has to be one of the greatest corporate public relations coups of all time. "By a soothing process of rationalization," wrote Horace M. Gray more than 50 years ago, "men are able to oppose monopolies in general but to approve certain types of monopolies. ... Since these monopolies were 'natural' and since nature is beneficent, it followed that they were 'good' monopolies. ... Government was therefore justified in establishing 'good' monopolies."<sup>[59]</sup> (#note59)

In industry after industry, the natural monopoly concept is finally eroding. Electric power, cable TV, telephone services, and the mail, are all on the verge of being deregulated, either legislatively or *de facto*, due to technological change. Introduced in the United States at about the same time communism was introduced to the former Soviet Union, franchise monopolies are about to become just as defunct. Like all monopolists, they will use every last resource to lobby to maintain their monopolistic privileges, but the potential gains to consumers of free markets are too great to justify them. The theory of natural monopoly is a 19th century economic fiction that defends 19th century (or 18th century, in the case of the US Postal Service) monopolistic privileges, and has no useful place in the 21st century American economy.

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