Verizon and MCI: A Merger that Promotes Competition

Richard E. Wagner Department of Economics, 3G4 George Mason University Fairfax, VA 22030

703-993-1132

rwagner@gmu.edu

http://mason.gmu.edu/~rwagner

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Executive Summary

The proposed acquisition of MCI by Verizon has led some people to raise concerns that this merger will impair telecom competition and hurt consumers. These claims rest on the premise that this merger, along with the proposed acquisition of AT&T by SBC, would promote excessive concentration in the telecom market as traditionally defined, as well as in the market for access to the internet.

These claims are based on an economic model of static competition that has no relevance to the supply of telecom services today. That irrelevant model is based on the presumption that technology is static, which means that competition is defined in a passive manner as the number of enterprises that are operating in a well-defined environment. The central question of interest in this static framework is whether there will be one, few, or many competitors.

In sharp contrast to this static model, technology is intensely dynamic in telecom today, and it has been since the breakup of AT&T which took effect in 1984. In this dynamic environment, producers continually are developing new technologies and creating new products. Competition is an active process of trying to create product offerings and forms of commercial enterprise that will result in the highest value of service to customers. Mergers, moreover, are an important part of this competitive process, as enterprises must continually adjust their organizational profiles as new technologies and products emerge, in order to position themselves to bring highly valued services to customers, thereby allowing those enterprises to flourish.

The merger of MCI and Verizon will obviously reduce by one the number of competitors in the provision of telecom services. But this reduction has nothing to do with monopolizing that provision and has everything to do with being an active competitor in seeking to find new and better ways of delivering valued services to consumers; for it is through doing this that commercial success comes. Those who oppose the merger are stuck in the past when they claim that the merger will increase concentration in wire-based phone service. The advance of technology has destroyed the once sharp distinctions among phones, televisions, and computers. With the transmission of voice, data, and video becoming increasingly integrated, we have entered a world where traditional phone companies are competing with such cable companies as Comcast, Cox, and Time Warner, as well as with such computer-oriented companies as Intel, Microsoft, and Yahoo. The merger of MCI and Verizon is an illustration of the competitive effort to provide valuable service in the presence of the striking technological changes that have rendered obsolete some longstanding notions about market boundaries.

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In April 2005, MCI accepted a proposal for acquisition from Verizon. This merger between the two companies will require various regulatory permissions before it can be completed. Not surprisingly, the merger has generated opposition, particularly among competitors to Verizon and MCI. In May 2005 the Federal Communications Commission posted 142 responses to the request to transfer MCI licenses to Verizon.¹ Of the more than 3,500 pages included in that posting, some 1,600 pages entailed responses by Verizon and MCI to questions posed to them. Of the remaining pages, the preponderant majority expressed opposition to the proposed acquisition. Much of this opposition was filed by a large number of competitors to Verizon and MCI, who understandably would rather see a major rival weaken than to see it strengthen. These rivals claimed that the merger would increase concentration in the provision of traditional wirebased telephone service, and so the merger should be rejected in the interest of protecting competition.

There is, however, a vital but nonetheless subtle distinction between protecting competition and protecting competitors from competition. Protecting competitors typically entails a restriction on genuine competition. In contrast, protecting competition generally leads to the disappearance of inferior competitors. This essay describes why this merger is an illustration of marketbased competition and not something that restricts market competition. It starts by reciting briefly some recent history of telecom, for much of the opposition to the proposed merger is stuck in time so to speak, as those opponents argue

¹ These are available at http://gullfoss2.fcc.gov/ for proceeding 05-75.

about concentration in market and product categories that were predominant in the past but which have been eclipsed by competitive innovation over the past two decades. The subtle distinction between protecting competitors and protecting competition is reflected in the history of economics by the presence of two distinct meanings of competition, one static and the other dynamic, and the contours of this distinction are described in the context of telecom and the proposed merger of MCI and Verizon. From there, the essay further elaborates how the dramatic transformation of telecom that we have been experiencing is testimony to the vitality of competition as an active and creative process. The essay closes by explaining how mergers can be important vehicles for achieving synergies within firms in an environment that is subject continually to innovation and invention.

Some Recent Telecom History

The opponents to the merger describe telecom in terms that were applicable before 1984, but which have since been eclipsed by new technology; therefore, a brief review of recent telecom history might provide some helpful orientation to readers who might not be familiar with this history. In 1974, the U. S. Department of Justice filed an antitrust suit against AT&T, which was settled in 1984 by breaking away seven Regional Bell Operating Companies (RBOCs) to serve as regional monopolies, leaving AT&T as a long distance carrier. Life was simple in the days of the AT&T monopoly. Aside from GTE and a few other, smaller companies, including Sprint, AT&T provided all phone service throughout

the nation. Practically the entire nation received phone service through copper wire that was laid and owned by AT&T. This wire became the property of the RBOCs after 1984. Moreover, people used phones to speak with people and for nothing else. The other form of two-way conversation, aside from face-to face conversation, was the letter, which was the domain of another monopoly, the U. S. Post Office. There was also a form of one-way communication through television, which was dominated by three licensed networks where most viewers received signals through rooftop antennas. This was the world of telecom in the period preceding the breakup of AT&T.

This began to change after 1984 as other long distance carriers, including MCI and Sprint, began to compete with AT&T. Indeed, AT&T's share of the long distance market soon fell roughly in half as a result of the entry of new competitors. At that time, phone calls were either local or long distance, with firms providing one or the other type of service. Customers, in turn, were either residential or commercial, and with phone service in either case being a means by which people spoke to one another. The opening up of the long-distance market to competition gave a stimulus to innovation, and with much innovation soon to appear.

Despite the emergence of competition for long-distance service, local service remained largely monopolized by the RBOCs. Twelve years after AT&T's breakup, the Telecommunications Act of 1996 was enacted in an effort to spur competition for local service. The primary obstacle to the emergence of local, wire-based competition is what is known as the "last mile" problem. The

last mile does not refer to any particular distance, but rather represents the idea that telephone service at the time required a phone company to lay wire from its facilities to the premises that were to receive phone service. The RBOCs had inherited their universal wire-based connections with the breakup of AT&T. A competitive local carrier would have had to lay new wire to provide service to the RBOC's customers. In most cases, doing this would not have been commercially sensible. For this reason, local facilities-based competition tended to be limited to high-density areas where a large number of connections could be made per length of wire laid.

The 1996 Act sought to change this situation by setting forth procedures by which competitive local carriers could lease facilities from the incumbent RBOCs. Competitive Local Exchange Carriers (CLECs) would no longer have to create their own facilities and lay their own wire, but could lease facilities from the Incumbent Local Exchange Carriers (ILECs). Just what facilities a CLEC might lease from an ILEC were for the CLEC to determine, based on its commercial judgments about what types of services it wanted to offer to those customers it was seeking to attract. A CLEC could lease particular elements from an ILEC, or it could even lease an ILEC's entire platform; this latter approach is equivalent to receiving access to an ILEC's full range of service at a deep discount.²

While a good number of CLECs entered into competition with the ILECs in this manner, and with most of them leasing the entire platform, the process was never an easy one and has since been abandoned by the FCC. The process

² For recent portraits of telecom regulation, see Nicholas Economides (2004a) and Jerry Ellig (2005)

was difficult because it required the ILECs to lease their facilities at prices that were almost surely below cost, and in any case certainly not profitable to the ILECs. To be sure, the FCC followed an articulated methodology in setting prices for leasing network elements. This methodology is known as TELRIC, which stands for "Total Element Long Run Incremental Cost." TELRIC is a hypothetical estimation of the minimum cost, under imagined idealized conditions, by which network elements could be provided: it is an artifact built from a draftsman's table, so to speak. It is not surprising that the ILECs were reluctant to participate in the leasing of their networks, particularly under terms dictated by TELRIC. For instance, efforts to probe the TELRIC methodology (Mandy 2002) suggest that TELRIC prices allowed an ILEC to cover only between one-third and four-fifths of its cost of providing their service to a CLEC.

Despite the understandable reluctance of ILECs to lease their network elements, some local competition did emerge through the regulated leasing of unbundled network elements. Competition also came from the construction of new facilities in densely populated areas, particularly serving commercial enterprises. Competitive sources of local access have obviously taken hold to some extent. The RBOCs began with close to 100 percent of the wire-based connections in their regions. An FCC report on Local Telephone Competition stated that as of mid-2004 Verizon had nearly 80 percent of the wireline connections in its region. While there has clearly been competitive entry into the provision of wireline service, the RBOCs and their successors remain by far the predominant source of wireline telephone connections.

This continued predominance of the RBOCs in their regions has been accompanied by a reduction through merger of the RBOCs from seven to four. The original seven RBOCs were Ameritech, Bell Atlantic, Bell South, NYNEX, Pacific Bell, Southwestern Bell, and US West. Subsequently, Ameritech, Pacific Bell, and Southwestern Bell became SBC, which is now seeking to merge with AT&T. Furthermore, Bell Atlantic and NYNEX merged, and then subsequently joined with GTE, a non-RBOC, to form Verizon. US West merged with and became Qwest. Only Bell South has remained changed, and has been the subject of a good amount of rumor about possible merger.³

Besides these mergers, the RBOCs have now all received permission to offer long distance service within their regions. A number of competitors to Verizon and MCI have opined that what has happened is little more than a replacement of AT&T's national monopoly up to 1984 with four regional nearmonopolies. For instance, a filing before the FCC by ACN Communications Services and 18 other opponents to the merger claimed that the proposed merger "essentially reconstitutes the old Bell System monopoly in almost 40 percent of the United States (p. 3)." In a related vein, the joint filing before the FCC by the Consumer Federation of America, Consumers Union, and the U. S. Public Interest Research Group describes the result of telecom developments since 1996 as having created a "cozy duopoly." Where the old AT&T was a national monopoly, the RBOCs are now joined by cable companies to form regional duopolies. Such arguments as these seek to establish that the

³ A wealth of relevant information is provided at http://www.bellsystemmemorial/com.

faced before 1984, except now the monopolies are regional and not national. Since people cannot be in two places at once, a regional monopoly is no different from a national monopoly, in that in either case most people have no effective choice among service providers. It is this absence of choice that is the intended meaning of references to high measures of concentration in telecom today: more concentration is intended to mean less choice, with 100 percent concentration, as before 1984, meaning no choice. Reality, however, is not so simple, as we shall see momentarily.

A Philosophical Sidebar on Mental Maps

Philosophers of science have occupied the foreground in reminding us that the sense we make of our observations about reality is conditioned by the mental frameworks or maps we use to organize those observations. This is an important point that bears heavily upon issues and concerns regarding competition and monopoly in the provision of telecom services. Competition and monopoly, unlike trees and sand, are not phenomena that appear directly to our senses. They are products of the mental maps we construct to make sense of our observations. In light of its importance to the subject at hand, a brief excursion into this territory might be helpful before continuing explicitly with telecom.⁴

We are all necessarily captives of the mental maps we employ in making sense of our observations. There is nothing wrong for this, for there is no way to avoid this situation. For millennia people believed that the sun rose in the east

⁴ For some lucid references, see Karl Popper (1962)(1968) and Fritz Machlup (1978).

and set in the west. This expression arose as part of a mental map that placed the earth at the center of the universe. Astronomers mapped the heavens to reconcile their observations of the heavenly bodies in terms of this Ptolemaic mental map. Then came Copernicus with his alternative mental map where the earth revolved around the sun, and we came subsequently to understand differently our observations of the heavenly bodies. While we still speak of the sun rising in the east and setting in the west, we now know that we are speaking figuratively and not literally.

In the Preface to his epochal *General Theory of Employment, Interest, and Money*, John Maynard Keynes referred to the difficulties of escaping "from habitual modes of thought and expression." He continued by noting that the "difficulty lies, not in the new ideas, but in escaping from the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds." The specific context for Keynes' lament was the conventional, equilibrium-based theorizing that dominated economics at the time he wrote, and which continued to dominate economic theorizing until late in the 20th century, when challenges from evolutionary-based theorizing began to gain significant momentum.⁵ According to this standard mental map, economic observations were observations of equilibrium patterns of prices and outputs, as conveyed by notions of stationary states. For Keynes, societies and economies were anything but stationary. They were continually in motion. Keynes sought to contribute to the development of an alternative mental map centered on motion and not on

⁵ For a fecund statement of an evolutionary alternative to equilibrium theorizing, see Jason Potts (2000).

stationarity. His work, however, was subsequently reinterpreted as a contribution to equilibrium theorizing, as Axel Leijonhufvud (1967) explains, and with the distinctive features of his contribution lost in the process. In this respect, it is worth noting that even at the time of Copernicus, the Ptolemaic maps of astronomical observations, with earth at the center, were successful in describing those observations.

The specific context of Keynes' statement aside, Keynes was pointing to a general problem of how our ability to think through new situations can be shackled by patterns of thought that were created in the context of what are now outmoded situations. A system of thought designed to characterize the logic of stationary states, where economic life continues indefinitely without change, is unlikely to be suitable to characterize processes of continual innovation and development, where the one certainty is that a strategy of standing pat in your commercial activity is the short route to oblivion. The problem Keynes identified surely applies to telecom today, as many of the patterns of thinking about competition in telecom were fashioned at a time when telecom was organized as a static monopoly. Contemporary claims about a continuing telecom monopoly, and claims that the acquisition of MCI by Verizon represents an intensification of that monopolistic position, reflect the problem that Keynes noted: of being trapped by habitual modes of thought when new situations call for new modes of thought. Technological innovation has destroyed the significance of the standard patterns of thought that were fashioned in the heyday of AT&T's monopoly.

That habitual pattern of thought contained several particularly important and confining features. One was that telephones are instruments by which people speak to one another over wire-based connections. Another is that telephones and televisions are distinctly different instruments used for divergent activities, and with computers being yet a third distinct instrument. If this oldfashioned pattern of thought is applied to the Verizon-MCI merger, it is possible to think that the primary difference between the pre-1984 situation and the current situation is that the national monopoly has been replaced by four regional monopolies.

To reach this conclusion, however, is to ignore all of the technological and commercial innovations that have taken place that have changed the characters of telephones, televisions, and computers, and of the enterprises that deliver those services. Competition has generated massive technological change, and those changes in turn have been generated similarly massive changes in the organization of commercial enterprises. This relationship between changing technology and subsequent changes in the commercial landscape is simple to see and easy to understand.

Telephones are no longer tied to wires. Indeed, there are now more wireless subscribers than wireline phone connections. Wireless phones now account for about one-third of local calls and three-fifths of long distance calls. Moreover, phones are not used just to speak to other people. Indeed, speaking has now become a minority use of phone service. Phones are also instruments for transmitting data and video. A person can now use a wireless phone to take

pictures and send them to distant places. Furthermore, cable wire is nearly as prevalent as phone wire, and cable wire can be used both to carry voice messages and transport data as well as video. In short, measures of concentration based on shares of wire-based connections are obsolete, as technological competition has changed the commercial landscape dramatically. A mental map suitable for commercial navigation within a stationary state can lead a voyager far astray if that map is used for navigation within a dynamic and turbulent economy.

Monopoly and Competition as Charted by Alternative Mental Maps

As a purely formal matter, monopoly is a simple concept. It describes a situation where a buyer faces but a single seller. Monopolization is equally simple as a formal matter, as it refers to efforts to reduce the options that buyers face: the outcome of successful monopolization is monopoly. While it is easy to give a formal definition of monopoly, it is not so easy to apply that definition in particular, substantive cases. Verizon and MCI contend that their merger enhances competition. Opponents of the merger contend the opposite, and claim that the merger is a means of monopolization. Both claims can't be right. The issue turns on the application of the formal concept of monopoly to the particular case of telecom today.

It is worth noting in this respect that competition has been used in divergent ways within the history of economics, as Paul Mc Nulty (1968) explains with particular clarity. This divergence, however, does not mean that the two

orientations are in direct conflict: one is not the negation of the other. The two orientations are non-commensurable, in that they address different types of questions. One orientation is static, with competition being a form of descriptive adjective that has nothing to do with competition in the ordinary sense of the verb, to compete. The other orientation is dynamic, in that competition is treated as an activity, a verb.

Competition as Static Structure. From late in the 19th century until late in the 20th century, economic theorizing was dominated by a conceptual framework and orientation that looked to 19th century physics models of static, mechanistic equilibrium for inspiration.⁶ What is most notable about competition within this conceptual orientation is that it does not refer to any kind of activity that people mean when they speak of competing or of being competitive, and refers rather to some descriptive features of some hypothesized equilibrium. Within this conceptual framework, products are produced with known technologies that themselves do not change (technically, they are exogenous to the model). The concept of equilibrium that is central to this conceptual orientation is the equilibrium that results, as a matter of logic and not of actual experience it should be noted, if each seller provides such a small part of an industry's output that it could exert no perceptible influence over industry output and the resulting product price.

Within the context of static equilibrium, each firm is conceptualized as continuing indefinitely to do what it is doing today, for in doing this the conditions of equilibrium are maintained. The reference to competition being static means

⁶ This theme is developed lucidly in Philip Mirowksi (1989).

that technology is frozen in time, and is not an object of competitive activity. Firms don't compete by trying to develop new technologies or products. Competition is only about price in the static approach. This notion of competition is useful for some pedagogic purposes because of its lucid simplicity. It leads to an idealized notion of competition where there are so many firms that none of them can exert any influence over market price, and rather must take the market price as something that is given to them and beyond their influence. Within this static framework, established products are produced within the context of clearly defined markets. There would be no ambiguity about the respective offerings of a phone company, a television company, and a computer company. The conceptual framework of the static approach to competition is simple and free from ambiguity.

With the boundaries of different products and markets clearly defined and distinct, the only question to be determined is how many producers will engage in producing that product. When there are many producers, the market is described as being competitive. When there is one producer, it is described as monopolistic. The territory in-between is ambiguous, and has been variously described as oligopolistic and as monopolistically competitive. What is most characteristic of this approach to competition is the complete absence of anything resembling genuine competition, as in competing against rivals for the patronage of customers. The only way a firm can gain significant influence over price is by attaining a monopoly, or something in the vicinity of monopoly, as perhaps illustrated by an 80 percent share of some market.

Competition as Dynamic Process. The alternative approach treats competition as an activity, a verb. Where the static treatment freezes technology and product development, the dynamic treatment regards the development of technologies and new products as the central feature of market-based competition. This second, dynamic way of treating competition, moreover, brings into the analytical foreground questions that are of more relevance for human flourishing than does the first, static way, for the road to flourishing runs through the development of new services and not through the indefinite continuation of old ones. Once rivalry is introduced, competition becomes an activity and not some static state of affairs. This shift in mental map brings invention and innovation into the foreground, for a significant part of the competitive process involves firms in trying to develop offerings that customers value more highly than the offerings of other competitors.

Competition is what competitors do in trying to expand their place within the commercial marketplace. Commercial activity is a rivalrous process that requires firms to pay continual attention to their products and services. A firm that would seek simply to hold onto its current market share will lose out to more vigorous competitors that develop superior products and services. There is no equilibrium position of rest for competitors, within the context of a dynamic approach to competition. Rather what exists is a continual need to be creative and innovative, for otherwise you will loose even your previous customers due to the creative and innovative efforts of your competitors.

The dynamic approach to competition is fundamentally about invention and innovation, and in several dimensions. New technologies can be invented, as when sound was added to motion pictures, when television came to be delivered through cable, or when telephones were given the capacity to identify incoming callers. New technologies can also bring about significant changes in the commercial landscape, as when the washing machine replaced the scrub board, bringing forth new companies in the process. Or, alternatively, when improvements in automobile travel after World War II led to more people taking longer trips to unfamiliar places. This led, in turn, to a desire for some greater degree of familiarity in the places people stayed and ate while they were away from home. In response, there was a growth of franchise and chain store operations in the provision of food and lodging, as entrepreneurs undertook new patterns of commercial activity so as to bring increased familiarity to an increasingly mobile population.

Statics, Dynamics, and Competition in Telecom. The static approach to competition places its analytical focus on the division of a market among providers. What is called the Herfindahl-Hirshman Index is an effort to construct an arithmetical measure that makes it possible to quantify a competition-monopoly spectrum. In particular, it is constructed by determining the market shares for each provider, squaring those shares, and adding the results. If one firm had 100 percent of the market, its HHI measure would be 10,000 (100^2). If ten firms each had ten percent of the market, the HHI measure would be 1,000 ($10(10^2)$). If Verizon has an 80 percent share of the wireline connections in its

region, that alone would provide an HHI of 6,400. According to the Horizontal Merger Guidelines issued by the Federal Trade Commission and the Department of Justice, an HHI in excess of 1,800 is said to describe a concentrated market, and thus to raise concerns about monopoly.

The dynamic approach to competition does not deny or dispute the validity of measures of static concentration, but rather focuses on different features of competition. With respect to telecom, for instance, the significance of an 80 percent share would depend on the options that are available. An 80 percent share of a market that is defined in terms of connections through copper wire was vastly more significant in 1985 than it is in 2005. In 1985 there was effectively no option to receiving phone service through wire owned by one of the RBOCs. Now there are many options, and the list is growing. Verizon might own the only source of copper wire to some building, so if those residents want to receive phone service over copper wire they have no option but to buy that service from Verizon. It is in this vein that the opponents to the acquisition of MCI by Verizon advance claims about a regional restoration of the old AT&T monopoly.

The ownership of copper wire, however, is economically much less significant now than it was in 1984. In 1984, copper wire was practically the only way to receive telephone service. A monopoly over copper wire was a monopoly over phone service. It was that simple then. It is not that simple now, for the ownership of copper wire is no longer an instrument of monopolization. People now have options for receiving phone service, many of them. Copper wire was

once essential for receiving phone service; it is no longer even necessary. Various forms of wireless service are now available. Cable TV likewise offers phone service through the internet, and all major cable TV companies now offer VoIP service. And experiments are now underway at delivering broadband connections over electric power lines. In 1984, the ownership of copper wire into premises was the key to monopoly. Now it means only that customers will consider you as one possible provider, in competition with other providers using different technologies.

Telecom as a Crucible of Dynamic Competition

The life of a monopolist can be one of quiet repose. As a monopolist, you face customers who have no option but to buy your product or go without. An assured stream of profitable revenue comes with your monopolistic position. Telephone service in the years before AT&T's breakup in 1984 was monopolistic, in that buyers had no option other than to use AT&T if they wanted telephone service. In this position, AT&T did not have to concern itself with losing customers to competitors. If people were to speak with one another without being in one another's presence, it would be over AT&T's phone lines. Executives with such a monopoly would have many things to think about, but possible responses to the offerings of competitors would not be among them. Their life could well be one of relatively quiet repose.

If the critics to the merger of Verizon and MCI were correct in their characterization that what is now in the offing is a restoration of AT&T's

monopoly, only on a regional and not a national basis, we should expect to see signs of quiet repose coming to prominence within the RBOCs. Yet, such signs are nowhere to be found, because the RBOCs are involved continually in seeking to be successful against other competitors who are seeking to do the same thing. Telecom is an intensely competitive activity, which standardized figures about concentration in wire-based connections do nothing but obscure.

The claim that such RBOCs as Verizon are on the throes of restoring regional replacements for AT&T's nationwide monopoly is plausible *only if one claims that telephone service and its environment today is unchanged from what it was 25 years ago.* Such a claim is, of course, patently false. There is no doubt that many people still hold images of wire-based phone service when they think of telephones, and could well do so even as they are calling home on a wireless phone from a foreign land. Keynes would have appreciated the irony of this situation. The reality, though, is that telephone service today means something sharply different from what it meant 25 years ago, and in many ways. Moreover, those differences will become increasingly striking, due to the continuing parade of technological progress and commercial innovation.

For one thing, it is no longer necessary to use an ILEC's wires to acquire phone service. Cable companies are now offering internet access and phone service over the internet through VoIP technology, as an alternative form of wirebased phone service. The joint presence of an ILEC and a cable company in the same territory, moreover, hardly constitutes a "cozy duopoly." In the long past world where telephone and television were disjoint instruments provided by

distinct commercial enterprises, it might well have been meaningful to speak of a cozy duopoly. To do so today, however, is to remain the captive of long outdated modes of thought, which, however, have been rendered obsolete by the advance of technology.

After all, cable was initially a means of bringing stronger TV signals to people. With the growing use of computers and the emergence of the internet, cable companies came to provide broadband services, getting a large jump on the traditional telephone companies in the process. With cable companies offering competitive internet access, the development of VoIP technology allowed cable companies to offer alternative, wire-based telephone service to subscribers. So now cable companies have become telephone companies as well, through a combination of technological progress and enterprise competition. At the same time, traditional telephone companies have shown increasing interest in offering what traditionally have been television services. What this situation illustrates is the continuing evaporation of the distinction between telephone and television, and the ever increasing integration of voice, data, and video. Verizon may well possess over 80 percent of the wire-based telephone connections in its area, but this situation means nothing like what it meant in the mid-1980s.

To be sure, Verizon is a major competitor in the provision of wireless service, but so are many other providers. A significant feature of wireless service, moreover, is that it avoids the last mile problem that plagued the effort of the 1996 Act to promote competition for wire-based telephony. Wireless service

has some quality issues that wired service lacks, but these are being resolved. Despite those quality issues, moreover, the evidence is conclusive that consumers treat wireless and wired service as good substitutes.⁷ As substitutes, higher prices for wired service will shift market demand away from wire-based providers to wireless providers.

In speaking of telecom as an arena of dynamic competition, one should not ignore the latency of competition from the provision of broadband over electric power lines.⁸ It is true that to date there are no large scale providers of broadband over power lines. There are, however, a number of experiments either underway or reportedly about to get underway. Among the places that have been mentioned in this regard are Manassas, Virginia, Cincinnati, Ohio, and Boise, Idaho. The primary obstacle to broadband over power lines is apparently economic and not technological. The technological problems can be overcome, at a price. The issue thus becomes whether it is commercially responsible to pay that price. If telecom services were priced monopolistically, power companies might well determine that they could make money offering a competitive service. And yet at the same time, they might well conclude that they can't be competitive, at least on a large scale, in light of the prices that prevail in the present, intensely competitive telecom environment. Telecom is an instance of a highly contestable market, which is one where potential competitors could enter

⁷ Substitution between wired and wireless service is examined carefully in Stephen Pociask (2004).

⁸ Good sources of information are provided by the Power Line Communications Association [http://www.plca.net/] and Power Media Communications [http://www.powermediatech.com/].

relatively easily.⁹ Among other things, contestable markets reduce the significance of standard measures of concentration, because the possible entry of latent competitors exerts a constraining effect on current providers that is ignored by standard measures of concentration.

The central point in all this is that competition is a dynamic process and not some static, unchanging state of affairs.¹⁰ There is an on-going tango that takes place between technological developments and the transformation of commercial enterprises. When AT&T was broken up, telephones were instruments by which people spoke with one another, and not much else. There was modest transmission of data over very slow modems, and there was no transmission of video.

Very little is the same as it was 20 years ago with respect to communication, and equally dramatic changes seem to be in the offing over the coming years. The activities that comprised a viable telecom company in 1985 would not comprise one today. The reason is that people don't want just to use the instrument we call a phone to speak with people. They also want to use it to browse catalogues and order merchandise, to send and receive pictures, and to send and receive written messages. And in doing all this, they don't want to be stuck to some particular location, whether this is a residence or a place of work. They want to be able to do it anywhere, anytime.

A quite different, dynamic notion of competition proceeds in terms of the development of new products and technologies. The opposition to the merger of

⁹ Contestable markets are examined in William Baumol, John Panzar, and Robert Willig (1982). ¹⁰ For a classic treatise on this theme, see Israel Kirzner (1973).

MCI and Verizon has been based on a static notion of competition. This notion is totally inadequate to appraise this merger, for there is absolutely nothing static about the telecom market. Indeed, there are fewer places where technological change is more vigorous, and those changes in turn are bringing about widespread changes in commercial organization. Organizational change is a vital part of the competitive process in the dynamic world that characterizes telecom.

Mergers and Organizational Competence

If we ask what mergers might accomplish, we find that the answers we give are conditioned by the analytical framework we use to address the question. This, of course, is something that Keynes would have appreciated fully in light of his lamentation on the persistence of habitual patterns of thought and the great difficulty of escaping from their influence. When competition is examined within the frame of reference provided by static equilibrium theorizing, mergers increase concentration within the well-defined markets that are presumed to exist within that analytical framework. The only question at issue is whether the increase in concentration represents a significant movement along the spectrum running from competition to monopoly. In the traditional economic model of a static world, where firms produce the same product continually without technological change, there is nothing for mergers to do other than to increase concentration. Mergers accomplish much the same thing as collusion could accomplish, only possibly with greater efficiency.

In the dynamic world in which we live, however, where competition is about the creation of new technologies and products, mergers can become instruments for promoting more effective competition. In a model of static equilibrium firms can be thought of as flying on automatic pilot, so to speak. To resort to automatic pilot in our dynamic world, however, is a recipe for disaster. Dynamic competition is an activity, and success in this activity is a matter of putting together the right organizational competencies to produce a successful team in a vigorously competitive environment. Mergers are largely about developing a desired set of organizational competencies to enable a firm to compete effectively in the market arenas in which it chooses to compete.¹¹

Verizon and MCI have chosen to compete in the global marketplace for telecom services, recognizing all the while telecom service today is something quite different from what it was 25 years ago. Verizon is an RBOC that also has a major presence in wireless telephony. MCI has a long distance presence and is a major provider of internet backbone. It is implausible in the extreme to claim that a merger between them is an instrument of monopolization. While the merger of Verizon and MCI would increase concentration in wireline connections, technological advancement is rendering such connections of decreasing commercial significance. A monopoly over copper wire was significant 20 years ago; it has but modest significance today and will have even less in the near future.

¹¹ Competence is explored in Nikolai Foss (1993) and Pavel Pelikan (1993). In a related vein, see Richard Langlois and Paul Robertson (1995) and Max Boisot, ed. (1995).

Internet backbone, moreover, is an arena where entry is easy and where providers have no incentive to restrict access. Indeed, in the early days of the internet, there were several commercial experiments with restricted access by service providers. Among the major providers of restricted access were America on Line, CompuServe, and Prodigy. Joining one of these programs gave you access only to those parts of the internet that the providers made available. This model proved not to be competitive against commercial models that offered open access, so those providers shifted to open access. The monopolization of internet access is nowhere on the horizon, as Nicholas Economides (2004b) explains.

An interesting mental experiment with respect to competition as an activity would be to speculate on what Verizon would have looked like had it not gone into wireless telephony. Could it not have existed in quiet repose with its monopoly over copper wire? Even to raise this question is to answer it in the negative, and with that negative answer giving testimony to the strongly competitive nature of telecom today. For Verizon to remain in the commercial forefront, it could not have relied on its dominance over copper wire, because the prominent position of copper wire was disappearing in front of it. Wireless was coming. Cable was coming. A Verizon that stood pat would be a Verizon that was sliding into obscurity. In a competitive world, standing pat is not a viable option. Verizon had no effective choice but to embark upon wireless telephone, unless it wanted to recede into the commercial background.

The simple matter is that people want to take their phones with them. In an increasingly mobile society where all family members work, phones that are attached physically to copper wire are of less value than they were in times past. In moving into wireless telephony, Verizon was acting as a competitor. There was nothing whatsoever that was monopolistic about its conduct. It was acting as competitors should act: to expand the value of the services they offer to the marketplace. In the coming commercial world, people working in a London office will expect to be able to speak with their peers in New York as if it were an interoffice call, by dialing a four digit number. They will probably also expect to be able to see their compatriots as they speak, and even if they are out of the office, moving about the country. To provide such forms of service is among the places where telecom competition is heading, and to get there requires the organizational capacity to combine numerous and complex skills and technologies. Mergers among firms with complementary capabilities can promote the attainment of such competitive success.

In Summation

The market for telecom services has been experiencing dramatic change over the past two decades, and there is no end in sight to these changes. Indeed, it is doubtful if it is even useful to think in terms of telecom services any longer. It is certainly that case that traditional voice-based communication is of minority importance regarding what is done with the instruments we still call telephones. These days, however, those instruments are not tied by wire to

some fixed location, but can be used anywhere someone travels. That instrument, moreover, can be used to take and send pictures, to send and receive email, and much more. Cable companies, which started as organizations to deliver better television reception to homes, now offer internet access and telephone service. The boundaries between telephone and television are crumbling, as are the boundaries with computers.

Twenty years ago, Verizon, MCI, SBC, and AT&T were undertaking commercial activities that were distinct from those undertaken by companies like Comcast and Cox Cable, and companies like Microsoft, IBM, and Intel were engaged in yet a different type of commercial endeavor. Today, however, those commercial endeavors are running increasingly into one another, perhaps even to be joined by electric power companies. For instance, Sprint (a traditional phone company), Motorola (a traditional television company), and Intel (a traditional computer company) are now working together to provide high-speed wireless communication services. The old-fashioned distinction among phone companies, television companies, and computer companies is fast becoming a potential exhibit for a museum of commercial history.

The commercial landscape of the near future will look quite different than it has looked in the past, possibly with the changes over the next 20 years even dwarfing those of the past 20 years. That the commercial landscape will continue to change dramatically we can be quite sure, even if we cannot see the precise features of that coming landscape. Verizon and MCI are competing vigorously in seeking to occupy a position of commercial prominence in that

coming world. They are acting as competitors, as exemplified by the meaning of the verb to compete.

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