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Economic and Political Consequences of the 1996 Telecommunications Act

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J O I N T C E N T E R

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Executive Summary

This paper investigates the economic and political consequences of the 1996 Telecommunications Act by examining relevant marketplace data. In key segments of the telephone and cable television industries, the reform appears to be encouraging competition. Interestingly, stock price data indicate that the wave of “mega-mergers” in telecommunications, an unannounced and possibly unanticipated result of the Telecommunications Act, appears to be associated with consumer benefits. These improvements in competitiveness are modest by some standards, but impressive when judged against the results of other legislation with the announced goal of increasing market rivalry (e.g., the 1984 and 1992 Cable Acts).

Federal policy makers also appear to be reaping benefits from the Telecommunications Act. The “deregulation”—which very cautiously opened markets, mandating extensive FCC rulemaking in the transition to competition—is associated with a sharp increase in political contributions to federal policymakers from telecommunications firms and executives. This is seen as an intended consequence of the act’s major reform: Removing policy jurisdiction from Judge Harold Green’s divestiture oversight and placing it in the hands of the Federal Communications Commission, a regulatory agency answerable to Congress.

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Economic and Political Consequences of the 1996 Telecommunications Act

Thomas W. Hazlett

I. THE GROUND HOG'S DAY OPERA

There is a distinct rhythm to anniversary reports on the Telecommunications Act signed into law February 8, 1996. As soon as the New Year's holiday fades, there appears a spate of news stories. Their lyrics are now hauntingly familiar: "Television, Telephone Rates Going Wrong Way after 1996 Telecom Act,"¹ "Law Not Lowering Cable, Phone Rates,"² "Is This a Free Market? The Telecommunications Act So Far: Higher Prices, Few Benefits."³

Each musical presentation stars three sets of actors: The Policymakers, the Executives, and the Activists. The Policymaker sets the table for the public policy opera by issuing a Great Boast: The Telecommunications Act "will lower prices on local telephone calls through competition. It will lower prices on long-distance calls through competition. It will lower cable TV rates through competition... This is the biggest jobs bill to ever pass this Congress."⁴ Inside players from former House Speaker Newt Gingrich to President Bill Clinton have performed this overture with polish and bravado.⁵

The plot forms when conflict arises: Enter, the Activist [stage left]. The Telecommunications Act is denounced "as an abysmal failure."⁶ The legislation has been

¹ *Detroit Free Press* (1998), online via Knight-Ridder Tribune Business News.

² *Associated Press* (1999), online via NewsEdge Corporation. See also *Chicago Sun-Times* (1997), Joshi and Sanger (1997, A39), Kanell (1997, G2), Douglas (1999, C1).

³ *Washington Post* (1997, H1).

⁴ Former Sen. Larry Pressler (R-SD), quoted in *ibid*.

⁵ Two standard openers: (1) "When Congress unveiled the Telecommunications Act of 1996, its members proudly touted the deregulation measure's promise of lower prices for consumers and new options for phone and cable services." Douglas (1999, C1); (2) "When President Bill Clinton signed the Telecommunications Act on Feb. 8, 1996, he claimed victory for residential telephone and cable customers." Solomon (1998).

⁶ "This law has been an abysmal failure to date," said Gene Kimmelman, co-director of the Consumers Union's Washington office." *Associated Press* (1999).

nothing more than a cruel hoax—“a big prank on consumers”⁷—or perhaps something more ominous: “the forces of evil are overrunning the forces of good.”⁸

Skirmishing ensues. News about prices is the hook—5-color charts showing raw data on cable rates unadjusted for quality improvements are the standard props—and then a recitation of the list of telecom mega-mergers. The Activist then takes center stage to belt out a dark melody; the lyrical aria sings that the act has led to consolidation, not competition, and higher prices, not consumer cost savings. The Telecom Executive is introduced as a supporting player, crooning a ditty praising the far-sightedness of the act in moving America forward—with a coda pleading for special relief for one itsy bitty little subsector (his). The “digital divide” (haves online, have-nots offline) makes its timely appearance at the instant that whispers about “competition in the business service sector” are heard offstage, leading straight to the exciting Climax: The Congressional Policymaker concedes some problems, but points to the FCC as the source. The FCC Policymaker concedes some problems, but points to the courts as the source. The Activist condemns the entire process as a problem, and points to corporate PAC money as the source. The charges and counter-charges build to a thrilling crescendo—and silence! A pianissimo soliloquy by the Congressional Policymaker softly allows as how, “A baby needs time to grow up,”⁹ assuring the audience that, “On balance, everybody agrees it’s a heck of a good law.”¹⁰

The Grand Finale has yet to be written for this tour de force, keeping the audience for yet another installment, next year, of the 1996 Telecommunications Act Anniversary Opera. (See Table 1.)

⁷ “‘So far it’s been a big prank on consumers,’ said Robert Ceisler, executive director of the Albany-based Citizens Utility Board. ‘We’ve seen increases in long-distance rates and very little competition on the local level.’” Joshi and Sanger (1997, A39).

⁸ “‘The forces of evil are overrunning the forces of good,’ said Mark Cooper, research director for the Consumer Federation of America.” Kanell (1997, G2).

⁹ “‘Complaints from consumers about higher prices and a lack of competition are met with pleas for patience. ‘A baby needs time to grow up,’ said Rep. Billy Tauzin (R-La.), the new chairman of the House Commerce Committee’s key telecommunications subcommittee... The nation’s top phone regulator, Reed Hundt, says consumers eventually will see big changes. ‘The actual proliferation of widespread price-lowering competition will be a two-,three-,four-year process,’ Hundt said.’” *Chicago Sun-Times* (1997, 44).

¹⁰ As quoted in Mills and Farhi (1997, H1).

Table 1.
TelecomAct.96.03
AutoWrite news stories on the Telecommunications Act of 1996
RealPlayer Audio in Vibrant Alto Italiano

ACT	SITUATION	CHARACTER	DIALOGUE/ACTION (italics sung in Italian)
I	Introduction	Policymaker	<i>Law is magnificent, competition at last!</i>
II	Plot	Activist	<i>Prices are up, the law is a sham!</i>
III	Complication	Telecom Executive	<i>Law IS magnificent, policymaker do you hear me? Merely one tiny adjustment!</i>
	Scene 2	[offstage voice]	The Merger! [deep organ chords] [consolidation beast runs unchecked through telecom forest]
IV	Climax	[graphic]	Raw cable price data: Do the policymakers know what they're doing?
	Scene 2	Congressional Policymaker	<i>Yes, we do! The FCC is out of control!</i>
	Scene 3	FCC Policymaker	<i>Yes, we do! The Courts are out of control!</i>
	Scene 4	Activist	<i>No, they don't! The PAC Money is in control!</i>
V	Denouement	Policymaker	<i>Give us a chance, we'll have some hearings. [pianissimo]. [Set up for next year's story.]</i>

II. INTERMISSION: PUBLIC POLICY ANALYSIS.

While the opera makes great music, the truth about the Telecommunications Act of 1996 (TA) differs markedly from the sound-bite kabuki arriving as reliably as Ground Hog's Day. The telecom marketplace is a big, complicated place, and the TA was a big, messy bill. Not everything that the marketplace has produced since February 8, 1996 is a result of the Telecommunications Act. Sorting out today's information sector developments is difficult by itself; attributing ongoing developments to reforms initiated in the act is difficult squared. The analysis becomes yet more complex when it is extended to encompass problems encountered due to reforms *not* undertaken by the TA: sins of omission. Finally, we cannot evaluate this act—or any act—without a standard. That is, what does one expect an omnibus legislative package to achieve? New laws reliably contain compromises and blemishes: How harshly should we deduct for failure to achieve a policy optimum?

A. Grading on the Curve.

Taking this last issue first, a baseline must be established. In the telecommunications policy world, there have been but a handful of major federal statutes to use for comparison purposes. Candidates include:

- The 1927 Radio Act;
- The 1934 Communications Act;
- The 1984 Cable Communications Policy Act;
- The 1992 Cable Television Consumer Protection and Competition Act.

The verdict on these measures, as evaluated in consumer welfare terms, is grim. The Radio Act allowed commercial broadcasters to cartelize the emerging radio market, blocking competitive entry via regulation.¹¹ While the conventional interpretation of the Act is that it was necessary to prevent chaotic interference over the airwaves, recent research shows that the radio market developed in orderly fashion under priority-in-use rules used in property law. Radio listeners

ended up with fewer, less diverse listening choices after the “public interest” standard—crafted by commercial broadcasters—was enacted to allocate airwaves in the 1927 Act.¹² As Bruce Owen writes: “Broadcast regulation began in earnest in 1927... From the beginning, regulatory policies were heavily influenced by and therefore beneficial to the industry they regulated. This was by design.”¹³

This anti-competitive outcome was cemented in place by the 1934 Communications Act, which brought the regulation of wireless and wireline communications together under one umbrella agency. This reorganization shifted interstate telephone regulation from the Interstate Commerce Commission (where it had been assigned in the 1910 by the Mann-Elkins Act) to the Federal Communications Commission, where it joined the spectrum allocation regulation moved over from the Federal Radio Commission (born in the 1927 Act). The regulation of long distance was well established under the regulated monopoly model, and the 1934 act only nominally challenged this policy by directing carriers to interconnect when ordered to do so by the Federal Communications Commission. “But,” Peter Huber writes, “the FCC never did so order.”¹⁴ In practice, therefore, the 1934 Communications Act shuffled offices and name plates, granting a quasi-permanence to extant pro-monopoly policies.

The 1984 Cable Act pre-empted local regulation of cable television rates, allowing prices charged by operators to rise without constraint following December 29, 1986 (i.e., deregulation was phased in over two years from October 1984). While rates rose in the deregulation period slightly faster than previously, quality also increased, as operators expanded channel allotments and networks procured more expensive programming. Subscriber growth increased from trend during the 1987-88 upward price blip, evidence that the rate control regime had not been suppressing quality-adjusted rates.¹⁵ The legislation had clearly anti-consumer consequences, however, in its provisions related to cable TV franchising. It required local governments to license local cable entrants, and barred telephone companies from receiving such franchises except in rural, sparsely populated communities. These provisions clearly raised barriers to entry in the sector, enhancing the emerging monopoly power of cable operators.¹⁶

¹¹ Hazlett (1990, 133-75).

¹² Hazlett (1997b, 905-44) and McChesney (1994).

¹³ Owen (1999, 79).

¹⁴ Huber (1997).

¹⁵ Hazlett (1996a, 145-64).

¹⁶ National Telecommunications and Information Administration (1988).

The 1992 Cable Television Consumer Protection and Competition Act modestly enhanced the opportunities for competitive entrants in cable TV markets with rules allowing upstart rivals better access to video programming.¹⁷ However, the measure's primary thrust was rate reregulation. This program quickly proved counter-productive for consumers, as cable systems responded to FCC-mandated rate rollbacks by lowering quality. The net verdict on the lower price/lower value package was rendered in the negative by consumers themselves: subscriber growth sharply dropped under the regulatory scheme. The outcome was visible even to regulators touting the benefits of regulation, and prompted the FCC to quietly relax controls beginning in late 1994.¹⁸

It is likely that at least three of these four telecommunications laws produced zero net benefits for consumers—or worse. The 1927 Radio Act and the 1992 Cable Act appear to have positively harmed consumers, raising the effective (quality-adjusted) price of service delivered to customers. The 1934 Communications Act is not likely to have had any appreciable impact at all, as it merely recodified rules already in place. Hence, a judging standard suggests itself: If the Telecommunications Act of 1996 results in positive net gains for the broad class of consumers—lower prices in quality-adjusted terms—this evidence ought to render the act a comparative public policy “success.”¹⁹

B. What Did the Act Cause?

What market outcomes result from the Telecommunications Act? The popular discussion of the Act has tended to view marketplace events occurring after the law as being *caused* by the law. Yet the Telecommunications Act of 1996 was clearly as much a reaction to forces underway in telecommunications markets as it was an effect on future developments. Whatever the intent or scope of the legal change, the market possesses its own dynamics quite distinct from the Act. The observance of revolutionary changes in communications technologies world-wide is

¹⁷ Federal Communications Commission (1995) and Hazlett (1995).

¹⁸ Hazlett and Spitzer (1997). See discussion below for more detail concerning the effect of price controls and competition on cable TV subscribership.

¹⁹ While such a modest standard may provoke cries of “grade inflation,” the historical rationale for this scale is compelling. Moreover, were we to conclude the law a “success,” the policy debate will surely not be over. There is still much to learn from further refinement (and grading) of the elements producing net social benefits in total.

testimony to the underlying momentum in this market.²⁰ The challenge for analyzing the effect of the act is to judge how that pre-existing momentum was diverted by the new law, which involves the delicate task of separating market movements which are observed from some hypothetical (counter-factual) alternative of what would have obtained in the absence of the legislation.

For instance, suppose we decide that a primary goal of the 1996 TA was to promote local competition in telephone service. We then observe that, since passage of the act, competitive local exchange carriers (CLECs)²¹ have realized very high revenue growth. How do we evaluate this information vis-à-vis the Telecommunications Act?²² Several CLECs existed prior to the TA, and state public utility commissions directly regulate the terms on which such firms enter and compete for market share—as they have since long before the Telecommunications Act. On the other hand, the Telecommunications Act ended the issuance of monopoly telephone franchises by the states and directed the Federal Communications Commission to promulgate a framework for states to follow in crafting rules for competitive access to the local exchange.

A different problem involves increasing competition in wireless telephone service. Journalistic and political sources have commonly attributed declining wireless phone rates to the act. Yet the rules governing cellular, personal communications service (PCS), and specialized mobile radio (SMR) licenses were created in FCC administrative proceedings independent of the Telecommunications Act. Moreover, the rulemaking for PCS, which has provided the jolt of new competition by issuing additional wireless licenses beginning in 1995, was formally begun in 1989. Similarly, newspaper stories attributing rate increases for cable television service to “deregulation” in the Telecommunications Act fail to note that there was no deregulation of cable rates in 1997 or 1998 pursuant to the act, and cannot therefore explain cable rate increases during those years. Moreover, cable rates were regulated by the FCC pursuant to the 1992 Cable Act, making the attribution of rate increases to “deregulation” a public policy non sequitur.

²⁰ Cairncross (1997).

²¹ “Competitive” here refers to the entrants attempting to take market share from incumbent local exchange companies (ILECs).

²² I assume that increased competitive local exchange activity results in lower prices for consumers. In one dimension, this is straightforward: customers would not switch to competitive providers did they not believe that they were being offered superior terms. It is questionable in another dimension, however. If the entry of competitors were the result of public subsidies or regulations incenting incumbent firms to raise prices (so as to encourage entry), consumers could be worse off as per the package of policies resulting in increased market share for entrants. This issue must be deferred for consideration elsewhere.

There are, of course, an unlimited number of reforms not taken in the Telecommunications Act, but the key omission is reform of spectrum allocation. In a measure hailed as “historic,” “pathbreaking,” “revolutionary,” and a “floor-to-ceiling rewrite of the Communications Act of 1934,” it is remarkable that fully one-half of the regulator’s telecommunications world—wireless—was left essentially in tact. Spectrum is yet allocated by central administrative process in the legal framework established in 1927. Licensees are still permitted to transmit wireless services only as prescribed in federal rules, entrants and new technologies still bear the burden of proof in a rulemaking to consider whether enhanced competition is in the “public interest.” The upshot is that FCC allocation rules effectively put a brake on innovative uses of spectrum and tax investments to improve technical efficiency in providing wireless service to the public. The Telecommunications Act was a missed opportunity for liberalization of the structure of radio spectrum allocation, an issue that has been dealt with elsewhere.²³ With this brief notation, the analysis will now deal with what the act did do.

C. What Did Cause the Act?

Since public policies are not constructed in a pristine world of selfless reflection, distributional effects and political incentives matter. Indeed, legislation does not occur without a political coalition gaining the strength to convince legislators that certain rule changes are in their interest. Such coalitions are most reliably powered by material interest. Hence, this paper will examine the margins on which congressional and executive policymakers actually operate, and inquire as to the impact of the Telecommunications Act in meeting expectations.

III. EVALUATING MARKETPLACE EVIDENCE.

The economic policy embedded in the act, explained simply, says:

1. Competition works better than monopoly.
2. Rules should promote the former, discourage the latter.
3. Less regulation will accomplish this—but not always... like now.

²³ Hazlett (1996b).

4. To ensure competition, we will need lots of supervision for a while.
5. And considerable subsidies for universal service.
6. Service to what, we're not sure—except that it should be universal.

Addendum:

1. Supervision will be complicated, which is why Congress created the FCC.
2. The FCC will foul up, which is why God created Congressional oversight.
3. Communications lawyers and consultants are people, too!²⁴

But legislation—like marriage—is a complex matter. Just because you can see its blemishes (or howl at them) does not mean that the thing is a flop. You view the matter in its complex entirety. And that involves a number of questions. The primary issue may be posed thusly:

(A) Has the Telecommunications Act of 1996 worked?

Prompting:

(B) What was the Telecommunications Act designed to achieve?

One must supply answers—or, at least, testable hypotheses—to (B) before answering (A). I summarize the primary outcomes designated by proponents of the act²⁵ in the following two propositions, offering tests of each.

Announced goal #1:

Increase Competition in Local & Long Distance Telephone Markets.

²⁴ This line has universal resonance to members of the communications bar, telecommunications policy consultants, expert academics, and government regulators. Others may need to know that the reference is to the very brisk business in professional services generated by the Telecommunications Act “deregulation” process.

²⁵ There are many targeted goals of the act which will not be analyzed in this paper, including the V-chip, the Communications Decency Act, the policy changes on radio and TV ownership, and universal service reform. All merit study, and are receiving it, elsewhere.

The act was clear, and its proponents vocal, that the primary purpose of the act was to dissolve the restrictions limiting competition in both sides of the telecommunications coin: local exchange service, and inter-exchange (long-distance) service.²⁶ Indeed, the goal of increasing competition in either market was assembled as a package deal. Opening the one (LD) was premised on opening the other (local).

Test: a. Have market shares for new competitors increased?
b. Have financial returns for incumbent firms been eclipsed by returns for new competitors? This analysis uses stock market evidence, estimating rates of return realized by shareholders in firms in these markets during the period in which the Telecommunications Act was debated, enacted, and enforced. Ranking telecom stocks by their performance, 1994 -1998, reveals much about the actual impact of the legislation.

Announced Goal #2:

Increase competition in cable TV markets.

The act ended the cable-telco cross ownership ban, which made it possible for phone companies to operate cable TV systems in their local service territories for the first time (excepting the waivers granted to rural telcos) since the FCC enacted a ban on video service by telcos in 1970. The act also offered minor policy reforms to advance satellite TV competitors to cable, and phased out rate regulation enacted in the 1992 Cable Act as of March 31, 1999.

Test: a. Have market shares for competitors increased faster after the act?
b. Have rates, adjusted for quality, decreased after the act?

In addition to the announced goals, major legislation typically involves important unannounced, or even unintended, consequences. The Telecommunications Act is not

²⁶ “Minutes before signing the Telecommunications Act in February 1996, President Clinton predicted the law would unleash a telecom revolution by tearing down government-imposed barriers to competition—particularly in the local and long distance phone markets.” *National Journal’s Congress Daily* (1999, 3).

exceptional in this respect. I summarize two apparent outcomes of the act which were not designated (either in the bill or by the bill's legislative proponents) as goals of the act:

Unannounced Goal #1:

Increase mergers between large telecommunications firms.

A reportedly unintended consequence of the act is the observed merger wave among major telecommunications service providers.²⁷ Some commentators assert that the act directly caused such combinations, but the act did not explicitly change merger law except in relaxing ownership restrictions for AM & FM radio licenses. Others, more plausibly, assert that implementation (or other) problems related to the act have moved firms to merge.²⁸ This is the unintended consequences view. However the merger wave is causally related to the legislation, the public policy issue of keenest interest concerns the effect of the industrial combinations on prices paid by consumers.

Test: Do investors anticipate that the mergers will raise prices, thus enhancing returns for companies throughout the sector? This evidence is gleaned from observing stock price movements around the public merger announcements. The pattern of stock returns evidenced during such windows allows us to distinguish the efficiency vs. market power explanations.

Unannounced Goal #2:

Increase Congressional jurisdiction over telecommunications.

The line-of-business restrictions dating from the 1984 AT&T divestiture were vigorously challenged in lengthy U.S. District Court proceedings presided over by Judge Harold Green. Standard theories of political economy would predict that Congress preferred to have such policy debates before the Federal Communications Commission, a regulatory agency overseen by Congress, for self-interested reasons.²⁹

²⁷ Whether the merger wave is more pronounced in telecom markets than in others is unclear.

²⁸ "Numerous legal challenges to the act and its implementation have been raised by the ILECs resulting in very slow implementation of the act, and, in many cases, in no substantial implementation of the provisions of the act. Thus, more than two years after the passage of the act, there is very little entry and competition in local exchange markets. In response to the apparent failure of the implementation act, there has been a wave of mergers in the US telecommunications industry." Economides (1998).

Test: Have federal political contributions from the regulated sector increased, relative to other sectors, after the act?³⁰

IV. LOCAL & LONG DISTANCE COMPETITION

A. Long Distance Telephone Service.

The simplest analysis under the 1996 Telecommunications Act relates to the progress made in enhancing competition in long distance. There has been none. That verdict is easily reached because the liberalization of long distance³¹ related specifically to Bell Operating Company³² entry; other LECs were already free to integrate into long distance markets within their local service territories (where, specifically, the ban applied to the BOCs). However, entry into long distance by the BOCs was conditioned on the satisfaction of a 14-point checklist and a “public interest” determination by the Federal Communications Commission. In the three years following the act the FCC denied several such petitions submitted by various RBOCs, and granted none. Hence, the conclusion: the act has thus far done nothing to promote competitive entry into long distance.

This does not render the policy senseless, however. It is plausible that, (a) the protective licensing layer slowing RBOC long distance entry was necessary to gain a majority to pass the Telecommunications Act, and/or (b) the IXC-entry process in the act is working to provide an incentive for BOCs to open local markets. This latter view claims that, given additional time, the “open local, integrate into long” bargain will prove beneficial to consumers.

²⁹ For a review of this literature, see McChesney (1997).

³⁰ There are, of course, other aspects of the Telecommunications Act that warrant investigation. For instance, it is clear that the Act was very much concerned with Universal Service in telecommunications. The problem for investigators, however, is that it is not really clear what the act’s goal was in this area, other than to protect the basic system with a new (and elaborate) institutional structure. The relaxation of radio station ownership restrictions might be an interesting area for investigation, but again it is not entirely clear what social goal would be (arguably) met in allowing individual firms to own a greater number of stations. To avoid the debate about the less clear cut goals of the act, this paper shall focus on the less controversial ‘big ticket’ items.

³¹ Long distance service is sometimes called “inter-exchange service.” Companies offering such are IXCs.

³² BOCs is the acronym, although “RBOC” (for Regional BOC holding companies) is the more common term. Following AT&T divestiture in 1984, seven RBOCs emerged: Pacific Telesis, US West, Southwestern Bell (SBC), BellSouth, Bell Atlantic, Nynex, and Ameritech. Through merger, the number of firms is being reduced. Pac Tel was acquired by SBC, and the purchase of Ameritech by SBC is now pending. Nynex was acquired by Bell Atlantic. Bell Atlantic additionally seeks to purchase GTE, the one independent (non-BOC) local exchange carrier of comparable size to the RBOCs.

The first argument is assuredly correct. The fierce opposition of the IXC's to pro-RBOC legislation would have very likely blocked any legislation if compromise was not reached. The Telecommunications Act, as introduced in early 1995, did not include either the 14-point checklist or the "public interest" determinations as requirements for RBOC entry into long distance. These provisions were expressly added at the behest of the IXC's, and were clearly intended to slow entry into long distance for some number of years. In a political world, this was payment to the IXC's for reducing their opposition to the bill. It worked to get the measure passed, and worked thereafter to put a brake on competition. Whether the price paid was too high is an interesting topic for another forum.

The second argument, that the freezing of RBOC entry will prove useful over time, is clearly speculative. By the FCC's own admission, the policy has not yet succeeded in opening local telephone markets—that is the premise upon which each RBOC petition for Sec. 271 relief (permission to enter IXC markets within their local service areas), has been rejected. The prevention of enhanced competition in long distance has some cost to customers, and that cost is being born upfront. In present value, risk adjusted terms, the payoff in future competitive benefits will have to compensate, with interest, for losses imposed early on. This is a highly leveraged public policy position, particularly in light of AT&T's recent acquisition of the largest US multiple cable system operator, TCI. The merger signals AT&T's decision to enter local telephone markets with its own facilities, abandoning the regulation-intensive approach theoretically available via the purchase and resale of unbundled network elements from existing local exchange carriers.

It should finally be noted that competitive forces appear to be affecting a reduction in quality adjusted rates within the long distance sector, where output is increasing steadily.³³ AT&T's market share is now, by some measures, below 50%, which some take as evidence that competition is increasingly robust.³⁴ These trends, however, were not created by the Telecommunications Act nor are they thus far impacted by the Telecommunications Act, given the RBOC shut-out on 271 petitions to the FCC.

³³ The FCC web page (www.fcc.gov) features both rate and output data for the U.S. long distance market.

³⁴ The problem with this view is that a monopolist, or price setting oligopolist, has an incentive to raise prices and voluntarily cede market share.

B. Local Exchange Telephone Service.

A great deal of attention has been directed to the truly massive administrative process prompted by the act in FCC rulemakings and in federal court challenges to those rulemakings. This discussion often leads to a comment on the futility of the act in promoting local competition, with the various sides choosing up villains (see the Opera, Table 1, for a lyrical synopsis). In fact, the marketplace evidence is not so negative. Indeed, by one measure—market share³⁵—competitive entry appears to be positively correlated with the Telecommunications Act, and by another measure—stock market performance of CLECs—at least neutral.

- CLEC Market Shares.

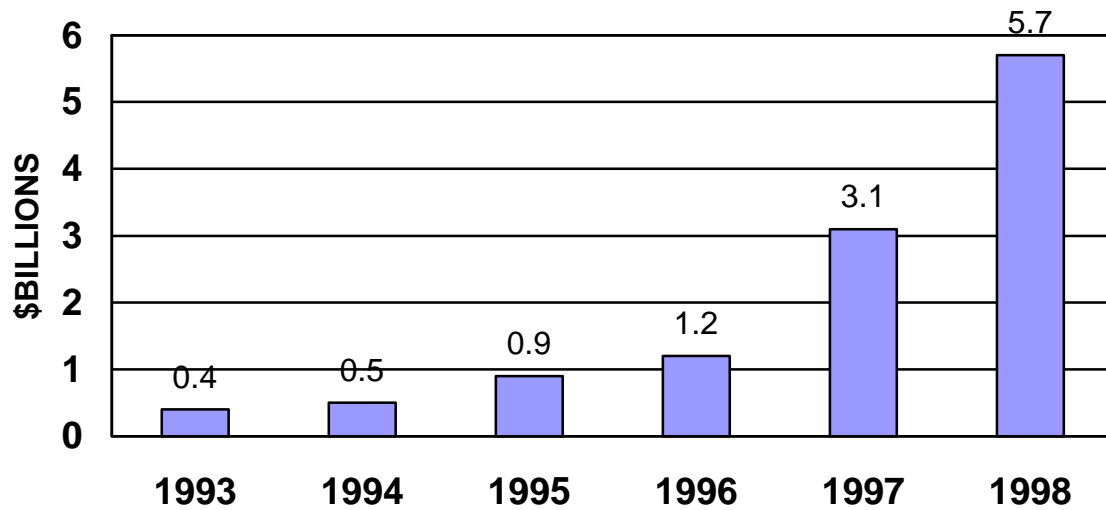
The financial status of competitive local exchange carriers, fledgling entrants attempting to take market share from established incumbent telephone carriers, is of interest. While the health of competitors can be a misleading guide to the state of competition, in this instance it appears a reasonable starting point. By the revealed preference of consumers, prices adjusted for quality are declining where competitors gain market share from rate regulated incumbent monopolies.³⁶

Annual CLEC revenues show a strong overall growth trend in the 1993-98 period (Figure 1), and one could interpret the series to accelerate in the post-act period. The small sample size limits the conclusions which may be drawn, but comparing the growth in CLEC revenues in the pre-act period vs. the post-act period implies a strong increase in the growth rate. In the 1993-95 period, CLEC revenues rose by \$475 million, or 114%. In the two years following the act (1995-97), CLEC revenues grew by \$2.2 billion, or 245%. This trend is supported by press accounts which, as of March 1999, claimed that “165 new phone companies [were] spawned by the

³⁵ The use of competitors’ market share as a proxy for competition can be problematic. If competitors, for instance, offer higher priced service but are favored by regulatory rules which artificially lower their costs and/or raise demand, complications arise. Similarly, firms which expand output by lowering prices may raise “monopoly” market shares in a process that increases consumer welfare via the exercise of competitive superiority. An analysis which looks more closely at the causes of market share changes in local telecommunications markets would be a welcome adjunct to the findings presented here.

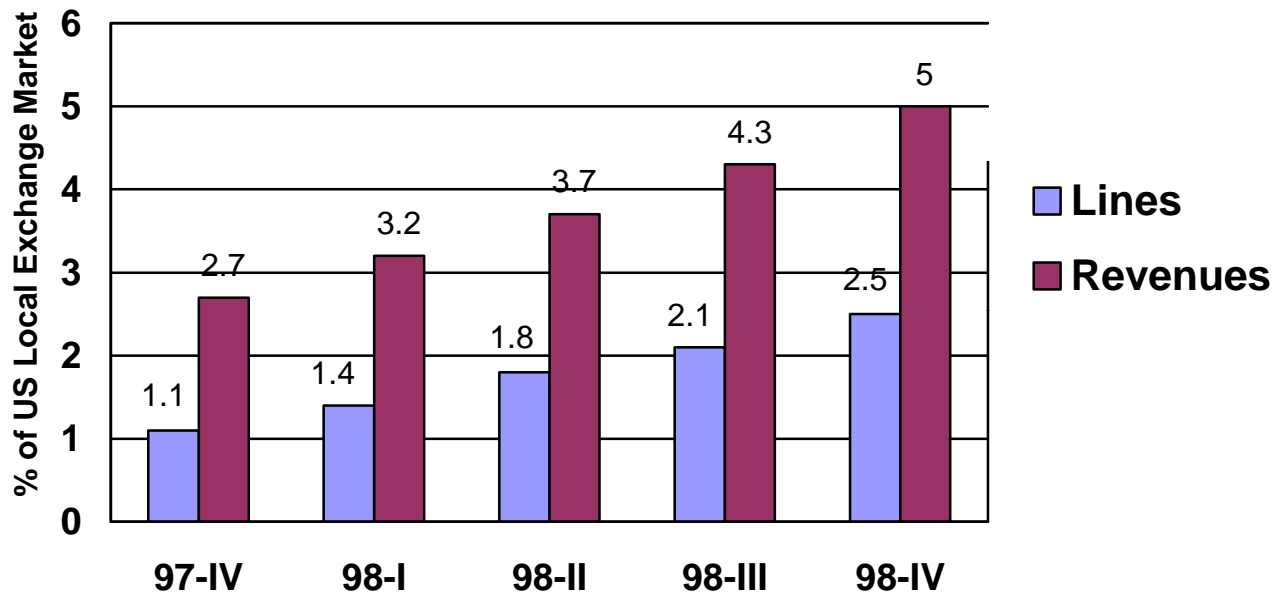
³⁶ This abstracts from the possibility of implicit or explicit subsidies, as noted above. Those issues, while interesting, form a separate discussion.

**Figure 1.
CLEC REVENUES, 1993-98**



Source: Federal Communcations Commision website

**Figure 2.
CLEC Growth, 97IV - 98IV**



Source: Merrill Lynch, Telecom Services -- Local, March 11, 1999.

law.”³⁷ This pattern suggests that the act may have been beneficial to the emergence of CLECs, and CLEC market share continues to grow in recent quarters (Figure 2).

That conclusion is reinforced by the substance of the act which did eliminate state laws granting monopoly franchises for the provision of local telecommunications. While many states had been independently abolishing or reforming such statutes and progress would likely have continued, the federal pre-emption embodied in the act appears to have bolstered that trend. That the market shares of the CLECs are still modest (2.5% of lines, 5.0% of revenues) may constrain the total benefits produced thus far, but does not obscure the direction of change.

- CLEC stock market performance.

The performance of the small number of publicly listed CLECs during the five year period, 1994-98, presents a mixed picture (Table 2). Only four companies can be charted throughout this period,³⁸ a span during which the act was drafted, debated, amended, passed by Congress, signed by the President, enacted by the FCC, and litigated in federal courts. Since the act ostensibly aimed to enhance competition in the local exchange market, it is reasonable to conclude that firms specializing in providing such service would enjoy windfall gains during this period. However, while all four companies produced positive returns for shareholders over the period, two (Winstar and Intermedia) beat the S&P500, which averaged annualized returns of 20.06 percent, and two (ICG and GST) did not. This split may be somewhat misleading, in that Winstar’s performance was sufficiently in excess of the market return as to make the performance of the portfolio of CLEC stocks superior to the market as a whole. If, for instance, one had invested \$10,000 in each of the CLECs at the beginning of 1994, the equally weighted portfolio would have been worth \$179,226 at the end of 1998. The same amount (\$40,000) invested in the S&P500 would have been worth just under \$100,000. Hence, capital gains in the small, publicly listed CLEC sector were roughly twice that for the S&P500. Some of this

³⁷ *National Journal’s Congress Daily* (1999, 4).

³⁸ Indeed, one of the four has only been publicly listed since March 1994. Many more firms were listed for some part of the sample period, including several firms which were delisted when acquired via merger. The CLEC firms listed are the only companies lasting for the entire 5-year period (or close to it), 1994-98, on the web site devoted to tracking competitive local exchange carrier stocks: www.clec.com.

Table 2.
PUBLICLY LISTED COMPETITIVE LOCAL EXCHANGE CARRIERS.

Company	March '99 Mkt Cap (\$mil.)	IPO Date	IPO \$ Price	1/94 \$ Price	12/98 \$ Price	94-98 % Gains	Ann. % Growth (APG)	SP500 Adj. APG
IPO Prior to Jan-94								
Intermedia	953.70	Mar-92	3.750	6.500	17.250	165.38	21.56	1.25
ICG	908.70	May-92	8.750	24.000	33.630	40.13	6.98	-10.89
Winstar	1360.00	Oct-93	3.500	3.060	39.000	1174.51	66.37	38.57
GST*	253.70	Mar-94		5.875	6.560	11.66	2.31	-17.06
IPO Since Jan-94								
e.spire	249.00	Mar-95	4.750	NA	6.380			
Hyperion	591.80	May-98	18.380	NA	15.130			
Allegiance Telecom	1137.43	Jul-98	13.750	NA	12.130			
Advanced Radio Telecom	213.70	Nov-96	15.000	NA	7.500			
US LEC	397.60	Apr-98	24.250	NA	14.810			
Advanced Communications	100.53	Feb-98	14.000	NA	4.190			
Covad Communications	1890.00	Jan-99	45.380	NA	NA			
Electric Lightwave	428.80	Nov-97	15.000	NA	8.190			
McLeodUSA, Inc.	2440.00	Jun-96	25.125	NA	31.250			
Level 3 Communications	17200.00	Apr-98	37.125	NA	43.125			
ITC/DeltaCom, Inc.	743.60	Oct-97	8.250	NA	15.250			
RCN Corporation	1560.00	Sep-97	13.000	NA	17.688			
Teligent	2070.00	Nov-97	25.625	NA	28.750			
Nextlink	971.40	Oct-97	26.500	NA	28.375			
S&P 500								
				466.510	1163.630	149.43	20.06	

Source: Financial data from www.yahoo.com. The list of CLECs is found on www.clec.com.

supranormal return is likely a risk premium for holding CLEC stocks,³⁹ which all have betas in excess of one. Still, the CLEC returns appear to be somewhat in excess of the market as a whole even with this adjustment.

A further bit of information can be gleaned from the stock market evidence on CLECs. Despite the fact that there is only a small sample of CLECs publicly listed throughout the relevant period, the sample becomes substantially larger by sample end. This growth is consistent with the idea that competitive forces are increasing in the local telecommunications marketplace, although it is not clear how much of the increase is causally linked to the act. By 1998, we observe that a number of firms have been successfully launched and are competing in local telecommunications markets. Moreover, some of these firms have substantial capitalizations: Level 3 Communications, whose IPO was in 1998, is valued at over \$17 billion, while Teligent, Winstar, Nextlink, Allegiance, Covad, Intermedia, ICG, and RCN all have market caps of about \$1 billion or more. It is clear that the stock market takes these forays into the local telephone “monopolies” seriously. By way of comparison, throughout the years following the 1984 Cable Communications Policy Act (legislation promising greater competition in local cable markets), there never developed a single public firm—of any size—whose business strategy focused on offering head-to-head competition in cable service.

Taken as a whole, then, stock market evidence suggests:

- Support provided CLECs in the TA was positive;
- Support provided CLECs in the TA was modest;
- Looking forward, substantial investors see competitive local exchange service as a potentially viable opportunity for investment capital.

C. Market Returns of Local and Long Distance Providers.

To gain some appreciation of how the Telecommunications Act may have influenced the most important industries “deregulated” by the act I calculated rates of return, net of the market

³⁹ The CLEC stocks have betas in excess of one (indicating average riskiness). In early 1999, Winstar’s beta was 1.57, Intermedia 1.26, GST 1.91, and ICG 2.56. These betas are not large enough to fully account for a two-to-one

return, for the leading local and long distance service providers. The set of firms examined in Table 3 include the three major IXC's (AT&T, MCI/WorldCom, and Sprint) and seven ILEC's (SBC, Bell Atlantic, Ameritech, US West, BellSouth, Cincinnati Bell, and GTE). The four CLEC's publicly listed throughout the 1994-98 period are displayed, as well as firms in related industries such as cable TV (TCI, Comcast, Century, Adelphia) and wireless telephony (AirTouch and Nextel). These firms were selected by the author, but no firms returns data were discarded. The most interesting data are the returns of the IXC's, ILEC's, and (already seen) CLEC's. In these areas the major firms are fairly easy to identify.

What does Table 3 reveal? Lacking more exacting event study results, we observe that the no sector appears to dominate the returns competition. While firms on average appear to beat the S&P500, indicating that telecommunications shares exhibited relatively strong growth in equity value during the relevant period, individual firm returns are highly volatile and exhibit no visible sectoral patterns. The best performing large firm through this period is MCI which, being acquired by rival long distance provider WorldCom, grew to a capital value in excess of AT&T's. AT&T, while still the largest grossing long distance provider, under-performed the market as a whole. Sprint was in the middle.

Among the large ILEC's, four firms beat the market and two under-performed. The equally weighted average annual abnormal return for the six firms is 3.25%, less than the equally weighted average annual return for the IXC's, 4.92%, but greater than the CLEC mean of 2.97%. These data can most easily be interpreted to mean that the act was not associated with any radical restructuring of the telecommunications sector, as a dramatic shift in policy would have resulted in markedly superior performance by one industry segment or another. Incumbent monopolists and oligopolists were not rendered unprofitable by the act, nor were competitive entrants showered with windfalls. These data temper the positive assessment of the CLEC post-act performance; general prosperity in the sector unrelated to the act may account for the positive (market adjusted⁴⁰) returns to CLEC's, ILEC's and IXC's.

returns differential in favor of the CLEC portfolio, although they can account for about 80% of it.

Table 3.
TELECOMMUNICATIONS FIRMS RANKED BY SHAREHOLDER RETURNS, 1994-98

Company	Sector	Mkt Cap (\$ mil)	1/94 \$ Price	12/98 \$ Price	1/94-12/98 % Gains	Ann. % Growth	Adjusted APG
Winstar	CLEC	1,360.00	3.060	39.000	1174.51	66.37	38.57
MCI	IXC	157,400.00	13.750	71.750	421.82	39.16	15.91
Cincinnati Bell	ILEC	2,690.00	3.257	15.356	371.53	36.36	13.58
Ameritech	ILEC	71,600.00	17.368	63.375	264.89	29.55	7.90
BellSouth	ILEC	89,400.00	15.375	49.875	224.39	26.54	5.39
US West	ILEC	27,700.00	20.031	64.088	219.94	26.19	5.10
Century	CATV	1,140.00	10.625	31.719	198.53	24.45	3.66
SBC	ILEC	102,900.00	17.930	53.389	197.76	24.39	3.60
Sprint	IXC	29,900.00	28.442	84.125	195.77	24.22	3.47
AirTouch	Cellular	53,000.00	25.250	72.438	186.88	23.46	2.84
Comcast	CATV	23,300.00	20.741	58.688	182.96	23.12	2.55
Intermedia	CLEC	953.70	6.500	17.250	165.38	21.56	1.25
GTE	ILEC	62,200.00	27.294	64.523	136.40	18.78	-1.07
Bell Atlantic	ILEC	89,500.00	23.084	53.622	132.29	18.36	-1.42
Jones Intercable	CATV	1,480.00	15.875	35.625	124.41	17.55	-2.09
AT&T	IXC	148,200.00	34.079	75.750	122.28	17.32	-2.28
Adelphia	CATV	2,330.00	20.750	45.750	120.48	17.13	-2.44
TCI Group	CATV	30,200.00	27.250	55.313	102.98	15.21	-4.04
ICG	CLEC	908.70	24.000	33.625	40.10	6.98	-10.90
GST*	CLEC	253.70	5.875	6.560	11.66	2.31	-17.06
Nextel	ESMR	8,160.00	42.000	23.625	-43.75	-10.87	-25.76
S&P 500	INDEX		466.510	1,163.630	149.43	20.06	

V. COMPETITION IN MULTICHANNEL VIDEO MARKETS

The effect of the Telecommunications Act in promoting cable television competition is complicated by two events: the 1992 Cable Act and the advent of digital direct broadcast satellite (DBS) service (by Direct TV/USSB) in June 1994. (Both have been briefly discussed previously, and a somewhat fuller treatment is necessary here.)

⁴⁰ Adjusted Annual Growth Rate = AAPG = [(1+APG)/(1+SP500 APG)] - 1.

The 1992 Cable Act offered both rate reregulation for monopoly cable systems⁴¹ and modest policy measures designed to enhance competition. Chief among the latter was a provision making some agreements between cable satellite networks (such as A&E or HBO) and cable systems non-exclusive, so that new competitors in cable markets could purchase programming to better attract customers. Digital DBS service was initiated soon after the act, and suppliers publicly credit the program access measure with enhancing their market prospects.

The primary impact of the act, however, was in reregulating the rates charged by 11,000 cable TV systems. Rates in the industry had been deregulated since 1987, when the federal pre-emption of local rate controls in the 1984 Cable Act kicked in. The market-pricing period, 1987-92, was replaced by reregulation, commencing with a rate freeze in April 1993. The FCC then, pursuant to the Act, enacted two rounds of “rate rollbacks,” 10% in September 1993 and an additional 7% in July 1994.

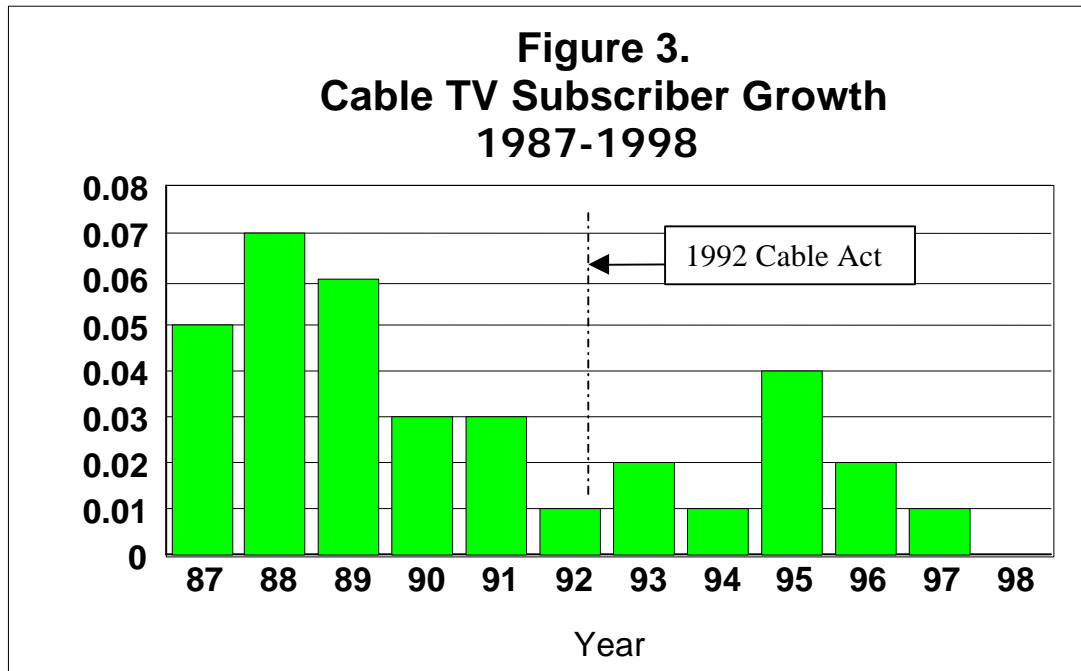
The effect of the controls was rather dramatic. As seen in the cable TV component of the Consumer Price Index, collected by the Bureau of Labor Statistics, the average U.S. cable bill was about 10% lower in October 1994 than it would have been under the trend prevailing when the Cable Act passed in October 1992. Yet, the results were not encouraging for consumers.⁴² Despite the price reductions, cable subscriber growth did not increase—the expected result were rates to decline while program and service quality stayed fixed. Indeed, cable penetration and viewership, the leading output measures in the industry, abandoned long-standing growth trends. Even the recovery from the recession of 1990-91 could not sustain cable household growth in the wake of the Cable Act, as seen in data from the National Cable Television Association (Figure 3).

The harsh marketplace reaction to the controls enacted under the 1992 act led to major changes in the regulatory structure. By the time the 1996 Telecommunications Act passed, the FCC had itself decided to effectively deregulate cable TV rates. This began in November 1994, when the Commission enacted the so-called going-forward rules, allowing cable systems to raise rates substantially when adding new program networks to basic cable menus. A series of “social

⁴¹A monopoly system was defined as one operating in a community where “effective competition” did not exist. The latter obtained, according to the act, with the presence of a second operator which served 15% of potential subscribers and offered service to at least 50%. (The presence of a municipally-owned second system would trip “effective competition” even without the service and coverage requirements.) Approximately 98% of U.S. cable subscribers were served by monopoly systems, thus defined, in 1992.

⁴² Hazlett (1997a).

contracts” were signed with cable system operators which further loosened controls. The liberalization quickly produced results—cable subscriber growth turned up again in 1995 (see Figure 3). The higher rates successfully discouraged perverse attempts by cable operators to lower quality and defer investments in upgrading systems, activities which had rendered the previous rounds of “rollbacks” counter-productive.



While many press accounts in 1997 and 1998 have associated rising cable rates with the Telecommunications Act, the characterization is incorrect. Moreover, the implication—that there are consumer welfare losses associated with the rising rates—is rejected by the evidence. The rising prices are clearly linked to increasing demand for cable services, demand shifts fueled by quality enhancements.⁴³ Importantly, this evidence is gleaned from consumer behavior itself. Growth trends indicate that households are more likely to subscribe to unregulated packages than to price-controlled cable packages. Since the former are nominally more expensive, the

⁴³ The fact that cable subscription prices increase over time is, ironically, evidence that something other than monopoly pricing is at work in the marketplace. A monopolist charges *high* prices, not *rising* prices. Indeed, for a monopolist to exploit market power by increasing prices gradually would sacrifice profits.

implication is that subscribers perceive them to be of higher quality. This is missed in reports focused exclusively on cable subscription fees.

Even with the FCC retreating to fig leaf rate controls, the statutory elimination of regulation may yield important additional benefits. That is because it reduces risk in investments in cable television system infrastructure. Such dynamic considerations are especially important when cable operators are vertically integrating into the internet access business. Given the generous bandwidth of cable TV systems, high-speed modems can be cost-effectively delivered to many of the 97% of U.S. households passed by cable TV wires. (Of these, about 70% subscribe.) This recent discovery has sent cable system values soaring; languishing at about \$2000 per subscriber for nearly a decade, 1999 transactions in the capital market saw investors paying up to \$5000 per subscriber. The cable euphoria is tied to investor enthusiasm for the cable modem business. @Home, the leading supplier of such service, was capitalized (in March 1999) at \$17 billion despite having just 500,000 subscribers (\$34,000 per subscriber).

While the breakthrough in data services effectively doubles the cable TV revenue stream (typical cable subscribers pay about \$35 per month, whereas high-speed internet access subscribers pay this amount once again), it requires substantial capital investments. Existing plant must be upgraded, and such upgrades are costly. Removing the risk premium associated with rate controls will lower the cost of capital in the sector, allowing the necessary investments to be made more efficiently. Conversely, the introduction of cable modems further removes rate regulation from serious consideration as a policy option. Constraining cable rates proved a failure even when industry technology was more settled. In the current maelstrom, rate rules encouraging efficiency-enhancing investments while preventing monopoly price mark-ups are even more difficult to craft.

None of this discussion diminishes the importance of enhanced competition. Quite the contrary: the failure of rate regulation magnifies the importance of competition by taking away any alternative. The Telecommunications Act expressly determined that greater competitive entry would improve consumer welfare, and codified the FCC's de facto deregulation by phasing out all cable price controls as of March 31, 1999. The 1996 act contained the following measures to advance competition in multi-channel video markets:

- Local zoning banning DBS dishes was curtailed.

- Local telephone companies were permitted to obtain franchises from municipalities⁴⁴ or the FCC, the latter under the newly created Open Video System model wherein most channel capacity would be reserved for third party programmers.

It is unlikely that the DBS measure much affected the marketplace, although again DBS operators publicly state that the reform helps them compete. The latter provision has led to substantial entry into previously monopolistic cable markets by several firms (see Table 4), including telephone companies permitted to own cable facilities in the 1996 Telecommunications Act. The largest overbuilders are Ameritech, a Bell Operating Company being acquired by SBC Communications, and RCN, an independent telecommunications provider offering integrated service (local telephony, video, and internet access) in direct competition with both established telcos and cablecos.⁴⁵ The effect of the new rivals is leveraged, as erstwhile cable monopolies respond to entry by dramatically lowering prices and upgrading service quality.⁴⁶ The net impact, then, is that from the competitive efforts of just these firms, somewhere in the neighborhood of 2.3 million households⁴⁷ face substantially improved choices in the multi-channel video market, a little over 2% of the U.S. market.

While cable “overbuilders” (including many additional firms) are as yet providing service to but a small fraction of U.S. households, it is clear their impact is growing. As in local telephone service competition, the level is modest but the trend appears positive. The visible signs of success are more impressive in light of previous failures to promote competition in the 1984 and 1992 Cable Acts. The latter legislation abolished exclusive municipal franchises, but there was no documented increase in overbuilding, 1992-96. The 1996-99 period, by contrast,

⁴⁴ This overturned a policy adopted by the FCC in 1970 and codified by the 1984 Cable Act.

⁴⁵ “RCN, the pesky telecommunications upstart that competes against local cable operators, phone companies and Internet service providers in the Northeast and California, announced recently that it closed 1998 with 855,000 ‘service connections,’ or customers. While half of these, or 498,000, are Internet access subscribers, that still leaves 261,000 cable and 96,000 phone customers, up slightly from the end of the third quarter.” Breznick (1999).

⁴⁶ Gruley (1997, A1).

⁴⁷ This assumes a 25 percent penetration ratio (subscribers/homes passed) for the two overbuilders. While incumbents average about 65% penetration, garnering business with an existing supplier already well established typically lowers sales projections. OpTel offers service to developments with 436,000 household units, increasing the “competitive fringe” by at least this magnitude.

Table 4. LARGEST COMPETITIVE MULTICHANNEL VIDEO PROGRAM DISTRIBUTORS			
<i>Firm</i>	<i>Mode</i>	<i>Date Begun</i>	<i>1999 Subscribers</i>
Direct TV/USSB	Satellite	1994	3,481,705 ^a
PrimeStar	Satellite	1990	2,029,452 ^b
EchoStar	Satellite	1996	1,168,029 ^c
Ameritech	Overbuilder	1996	>200,000 ^d
SNET ^e	Overbuilder	1997	28,000 ^f
GTE	Overbuilder	n.a.	102,567 ^g
Knology Holdings	Overbuilder	1994	80,068 ^h
RCN	Overbuilder	1997	276,088 ⁱ
OpTel	SMATV	1993	217,593 ^j

a. March 29, 1999 figures from www.dbsdish.com.

b. Ibid.

c. Ibid.

d. *Ameritech Extends Cable Competition in Detroit Metro Area*, Ameritech Press Release, www.ameritech.com (March 9, 1999).

e. Southern New England Telephone, acquired by SBC Communications in 1998.

f. Email communication from SNET (July 15, 1999).

g. May 1999; CABLEVISION ONLINE: Database -- Top 100 MSOs (Vol. III, pp. 103-5).

h. March 31, 1999; *Fast-Growing Knology 'Scares' Cable*, MULTICHANNEL NEWS (June 22, 1998), pp. 52-3.

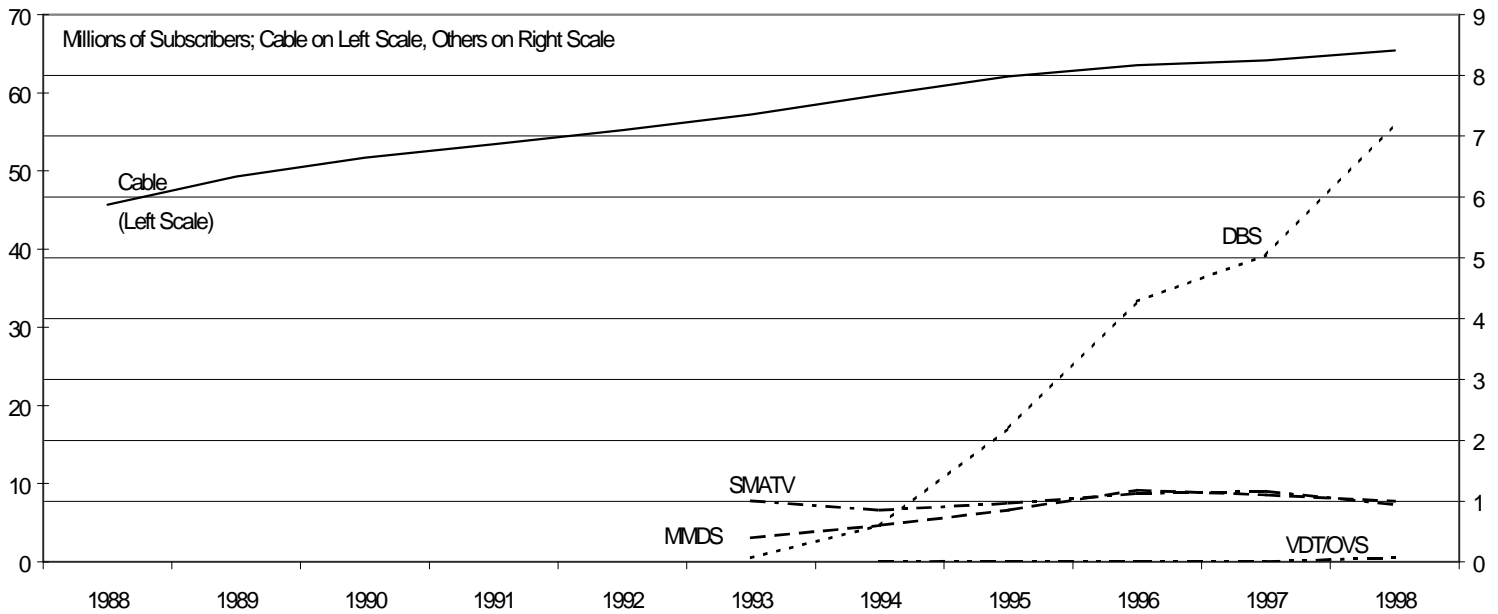
i. As of June 30, 1999 (SEC filing by RCN).

OpTel, Inc. Reports Results for First Quarter, OpTel Press Release (Jan. 14, 1999). SMATV (satellite master antenna television) suppliers serve residential developments, typically on a contract basis. They are also called "private cable" operators.

features a growing competitive market segment spearheaded by two integrated, well-capitalized telecommunications providers.

An even stronger growth pattern is seen in DBS, although it is problematic to associate this growth with the TA. Indeed, as seen in Table 5, the pre-TA subscriber growth rate (1993-95) exceeds that evidenced following the act (1995-97). One must be careful in categorizing this change, however, as the actually units sold increases in the latter period (sales growth is simply a lower proportion of an expanding base). While the TA may not have launched DBS, it does not appear to have retarded it, and the year-end 1998 DBS subscriber total of 9.28 million⁴⁸ presages an important development regarding multichannel video competition—at DBS's 1998 growth rate, some 15% of U.S. households will subscribe to DBS in the first half of 2000. By the definition in the 1992 Cable Act, this will officially designate the U.S. cable market "effectively competitive."

Figure 4.
MVPD Subscribership, 1988-98



Sources: Annual FCC Video Competition Reports and DBS INVESTOR.

A final aspect of the Telecommunications Act's effect on multi-channel video competition bears discussion. As seen in Tables 4 and 5, recent growth trends in DBS and among cable overbuilders are impressive. Alternatively, the MMDS trend is disappointing, stalling at around 1 million subscribers. However, the tiny blip on the horizontal axis—VDT/OVS—is most instructive. Video dialtone (VDT) was the subject of the FCC's long-running regulatory rulemaking (1987-1996), an administrative process which produced an exhaustive record as to how the Commission should regulate cable systems owned by telephone companies, providing for common carriage of third party programming. The VDT proceeding did finally succeed in licensing one provider—New Jersey Bell, a subsidiary of Bell Atlantic—to operate such a system. The Dover, New Jersey system signed up 1,250 subscribers before being terminated in the wake of the 1996 Telecommunications becoming law. The system migrated to the new model for video common carriage created in the Act—Open Video Systems (OVS).

⁴⁸ DBS Investor.

Table 5.
GROWTH IN MULTI-CHANNEL VIDEO SUBS BEFORE & AFTER 1996 T.A.

	1993	1995	1997	Pre-TA Gr. %	Post Gr. %
DBS	602	2,200	5,047	265.45	129.41
CABLE	58,834	62,956	65,929	7.01	4.72
MMDS	400	850	1,000	112.5	17.65
TOTAL	59,836	66,006	71,976	10.31	9.04

Sources: Annual FCC Cable Reports; Sky Report (DBS).

The story of VDT is summarized by one statistic: 1.47. That is the ratio of VDT filings to VDT subscribers. (Indeed, it is the high end subscriber number achieved after nine years of administrative procedures.) There were 851 Comments, Reply Comments, and Petitions for Reconsideration filed by various parties in the FCC rulemaking, which consisted of:

- Notice of Inquiry;
- Further Notice of Inquiry and Notice of Proposed Rulemaking;
- Further Notice of Proposed Rulemaking, First Report & Order, and Second Further Notice of Inquiry;
- Second Report & Order, Recommendation to Congress, and Second Further Notice of Proposed Rulemaking;
- Memorandum Opinion & Order on Reconsideration and Third Further Notice of Proposed Rulemaking;
- Fourth Further Notice of Proposed Rulemaking.⁴⁹

The OVS process has resulted in a few thousand competitive cable subscribers, thus besting the total output of nearly a decade of VDT rulemaking. But it is striking that the two most carefully crafted models for competitive entry into local video markets, each meticulously designed so as to produce consumer benefits, have rendered the least amount of actual service to customers of the competitive alternatives available. The lack of success by regulation-intensive

⁴⁹ Federal Communications Commission, CC Docket No. 87-266. See also, Affidavit of Thomas W. Hazlett, *In the Matter of Implementation of Section 302 of the Telecommunications Act of 1996: Open Video Systems*, FCC 96-99, CS Docket No. 96-46 (April 17, 1996).

frameworks to open up local cable markets mirrors the disappointing results obtained in the FCC's element unbundling proceeding in telephony. The most successful CLECs, in the opinion of investors risking capital, primarily rely on their own physical facilities to provide local connections. With AT&T acquiring TCI, the country's largest operator of cable systems, and then executing a long-term agreement with Time Warner, the country's second largest cable operator, the long distance leader has signaled its strategy to provide independent (non-ILEC) local access. This apparent abandonment of local reselling in favor of vertical integration into facilities-based competition signals a verdict common to both cable and local telephony.

VI. THE EFFECT OF TELECOMMUNICATIONS MEGA-MERGERS

Perhaps no single development in the post-TA marketplace has received more popular comment than the wave of mergers between large-scale telecommunications providers. The following announcements were key:

- SBC would acquire Pacific Bell (April 1996)
- Bell Atlantic would acquire Nynex (April 1996)
- WorldCom would acquire MCI (October 1997)
- AT&T would acquire TCI (May 1998)
- SBC would acquire Ameritech (June 1998)
- Bell Atlantic would acquire GTE (July 1998)

None of these attempted mergers have been blocked by the antitrust authorities (as of this writing, the first four have been consummated and the final two are pending). In addition, a much larger string of smaller combinations has occurred, along with a rash of product development partnerships and marketing alliances. This furious corporate restructuring in the telecommunications sector is identified by Wall Street analysts as preparation for dramatic changes in the way in which communications services are created, supplied, and sold, a theory supported by the contemporaneous explosion in internet stock values. With respect to the large-scale mergers, the anticipation is that, simultaneous to disintegration of key elements in the telecommunications product market (with many niche players offering innovative products),

customers will increasingly shop for branded, integrated packages of services. Large-scale firms can offer such ‘one-stop shopping’ either by themselves integrating into disparate product lines or by tying together the offerings of independent service providers. Mergers and joint ventures are seen two sides of this coin.

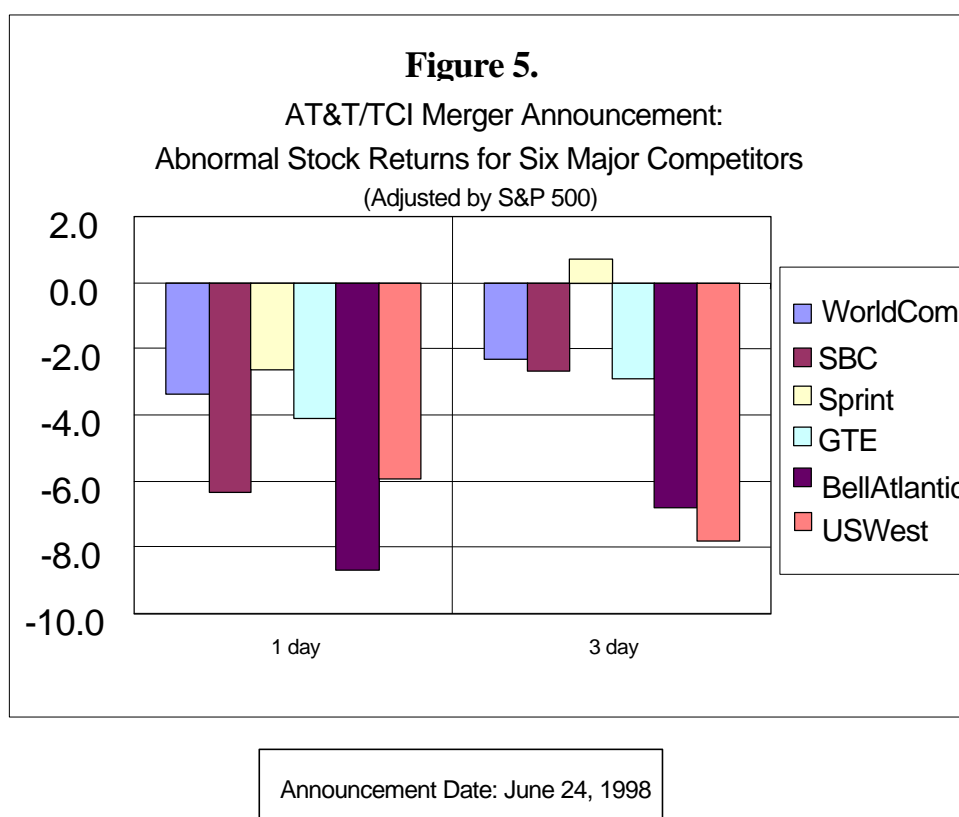
The economic effect of such mergers and alliances is typically theoretically ambiguous, and the standard method used by the antitrust agencies to screen such combinations for legality is to compare the likely benefits (greater efficiency in creating and distributing products to customers) against the likely costs (the possibility that greater market concentration will allow firms to raise prices to customers). Combinations likely to provide net efficiencies are presumptively legal. This analysis, conducted in each case by the U.S. Department of Justice Antitrust Division, has given the green light to the four completed mega-mergers, and is still being conducted for the SBC-Ameritech and Bell Atlantic-GTE mergers. There is evidence provided by the capital markets, however, which illuminates the likely efficiency implications of the mergers in question.

Here I examine the three most recent telecommunications mega-mergers. The AT&T-TCI combination is added to the two currently pending such that our analysis overlaps the subset of “approved” and “pending” mergers. The methodology is that of an “event study,” a standard procedure in the financial economics literature. The basic idea is to observe abnormal stock returns⁵⁰ around the time a public announcement takes place, seeing what investor behavior (driving securities prices up or down) says about expected effects of the announcement. Since investors have strong incentives to carefully judge future changes in firm profitability from current information, and because capital markets are relatively efficient in rewarding good predictions while punishing inaccurate ones, stock price movements are thought to embody sophisticated—and unbiased—projections.

With merger announcements, stock price reactions are often quite dramatic. Firms acquired in tender offers or hostile take-overs typically see abnormal returns of 20-30% around merger announcements. (Acquiring firms see virtually flat—zero abnormal—returns on average.) What is most interesting in analyzing merger announcements for antitrust purposes is to observe the returns to shareholders in firms competing with the merging parties. If two firms

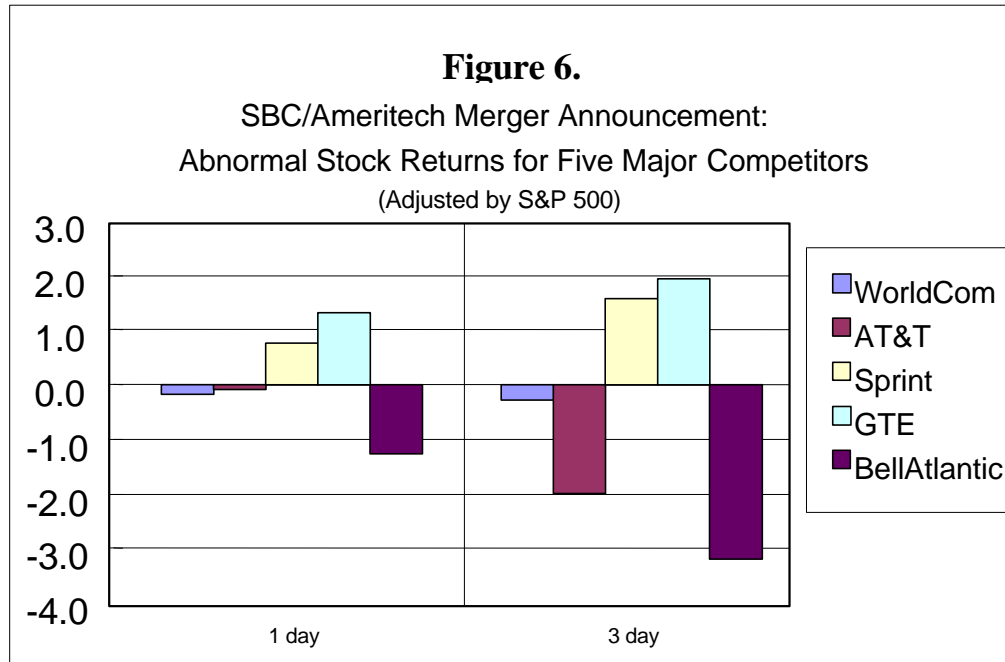
in an industry merge (i.e., there is a horizontal combination) and the stock prices of the n remaining competitors increase in response, it may be reasonable to conclude that the observed anticipation of increased industry profitability is tied to the price-raising effect of an anti-competitive combination.⁵¹ Where, conversely, competitor stock prices fall on announcement of a merger between two rivals, financial investors likely evince an expectation that competition will intensify, driving output prices down.

This economic logic is used to examine three recent telecommunications mega-mergers. Industry competitors have been defined as large-scale, integrated telephone companies which present the most direct rivalry to other such firms (here, the merging parties) in the nationwide competition for business and residential telephone customers. The abnormal returns for 1-day and 3-day trading windows surrounding the three merger announcements is displayed in Figures 5, 6, and 7.

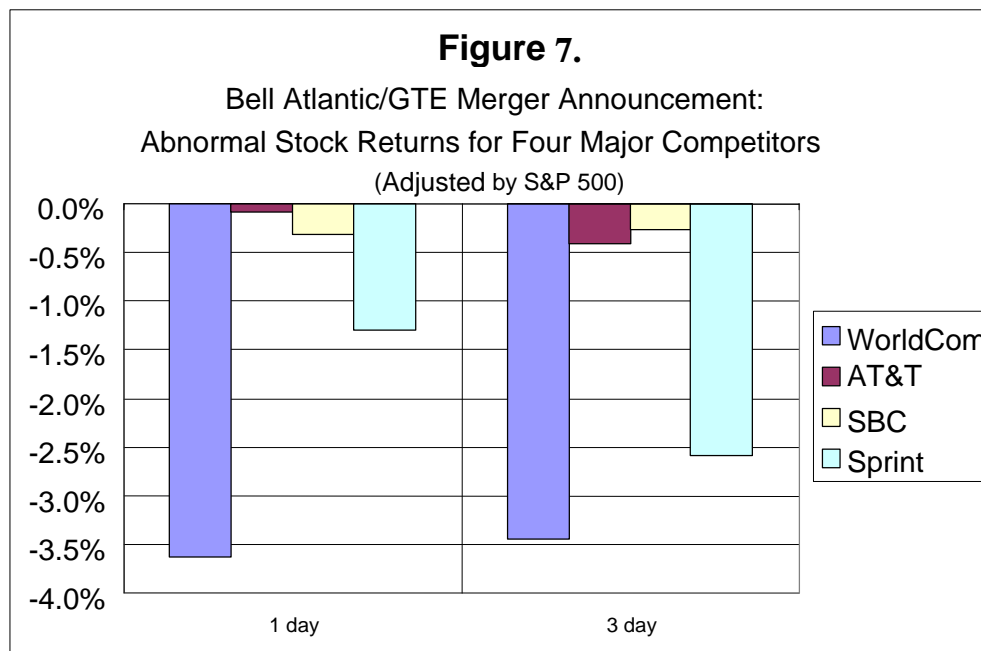


⁵⁰ Abnormal returns are actual returns adjusted for the return of the market portfolio (here, the S&P 500). If, for example, an individual stock exhibits a return of 8% over some period, which is exactly equal to the S&P 500 return over the same period, then the abnormal return for the individual stock is zero.

⁵¹ The “take-over” effect may also cause returns to shareholders in non-merging firms in the industry to rise, and this link to rising returns for rivals is not associated with rising consumer prices.



Announcement Date: May 11, 1998



Announcement Date: July 28, 1998

The financial evidence indicates that investors generally do not believe that any of the three mergers will systematically raise profits for their competitors, suggesting that prices to consumers are unlikely to rise from enhanced market power. The strongest results are evident in the AT&T/TCI merger, which is accompanied by strongly negative returns for all of its large-scale rivals. The Bell Atlantic/GTE merger announcement generates similarly negative returns for the competitive cohort, but of lower magnitude. The SBC-Ameritech merger produces mixed results, but the overall 3-day returns to competitors are negative, suggesting that rivals are not expected to profit from the merger. Taken together, these results tend to support the efficiency view of the mergers, rejecting the market power explanation. The restriction of output associated with a merger which raises prices to consumers will distribute gains across the entire set of horizontal competitors, but such gains are do not appear to be anticipated by financial investors in the three mergers analyzed here. This evidence, together with formal DOJ approval of the previous mega-mergers, leads to the conclusion that consumers will be benefited in the form of lower prices and more efficient service provision due to these dramatic changes in market structure in the wake of the Telecommunications Act, whether or not the merger wave was intentionally encouraged by policy makers.

VII. THE TELECOMMUNICATIONS ACT AND POLITICAL CONTRIBUTIONS.

The Telecommunications Act was the product of realpolitick. Reforms of the size and scope of the Act involve compromises and pork barrel bargains, such that an actual majority—or super-majority to circumnavigate the veto power of various interest groups and committee chairs—can form a coalition to enact law. In the competitive rivalry in the political world, disparate interest groups jockey for advantage, holding out for better deals so long as the expected benefit exceeds the expected cost. Often the interests of incumbent officeholders in continuing contentious legislation in future legislative sessions (where support groups can be cajoled or threatened, and electoral benefits for the official thereby extracted), combines with the interests of reform opponents (and the status quo is rarely without a considerable number of friends—which is how it *became* the status quo) to block legislation altogether. This, indeed, describes the twenty-year legislative impasse which preceeded the Telecommunications Act, as countless efforts to “update” the 1934 Communications Act had been stymied since the ambitious effort by Cong.

Lionel van Deerlin (D-CA), then chair of the House Subcommittee on Finance and Telecommunications, during 1976-80.⁵²

To overcome such natural inertia in legislation touching on many controversial issues and challenging the interests of important economic constituencies, it is helpful to have some unifying motivation for Congress to act. A public emergency is the classic motivating factor, a situation where the standard reasons for not legislating are momentarily overwhelmed by political actors who seize the opportunity (partly out of desire to grab credit for forging a solution, partly out of fear of appearing unresponsive or “out of touch”). Yet, no great crisis gripped the public in 1996; the issue of telecom reform was no more visible than in previous years. Why did legislation pass at this moment, and not before?

It is difficult to pinpoint the motivating factors for legislation, but a theory put forward here is that major telecommunications legislation became more likely to pass as the political benefits to incumbent officeholders themselves generally increased. There are always benefits to distribute in legislation, but there are typically costs associated with these; the transfer of rights from one constituency to another is a standard example. The political gains from recipients are offset to some degree by the opposition engendered among the group which is taxed. What particularly motivates congressional and executive branch policy makers are reforms bestowing cost-free benefits on officeholders. One became available in telecommunications law—taking decisions about relaxing the MFJ’s line-of-business restrictions away from Judge Harold Green, and putting them in the hands of Congress and an agency it oversees, the FCC.

Intense rent-seeking and rent-defending activities were taking place in federal district court. This represented a lost opportunity from the perspective of lawmakers. Since the mid-1980s, the BOCs had been attempting to wiggle free of the constraints placed on them by the consent decree ending the mammoth AT&T antitrust suit in 1982. That decree (supervised by Judge Green) divested AT&T of its local telephone service providers (the Baby Bells, or BOCs) and its manufacturing arm, Western Electric. While the long distance company (which remained “AT&T”) and the manufacturing unit were allowed to offer a variety of services as befit their business strategies, the BOCs were sharply restricted to providing local exchange service. Specifically, the companies were barred from providing long distance phone service,

⁵² For a fascinating, detailed account of this episode, see Krasnow, Longley, and Terry (1982).

manufacturing phone equipment, or supplying “information services” (which included video products such as cable television service).

The rationale for such restrictions was that the BOCs continued to occupy monopoly bottleneck positions in the telecommunications marketplace, and could—if allowed to integrate into otherwise competitive ancillary markets—inefficiently exclude competition. The restrictions were challenged almost at once by the BOCs, however, and the challenge gained momentum following a 1987 Department of Justice report documenting that the telecommunications market was changing so rapidly that the rationale for restrictions were growing dubious.⁵³

Between that time and the mid 1990s there occurred intense legal skirmishing. As described by Peter Huber, author of the 1987 DOJ report:

[Judge Green’s] courtroom operated as a shadow FCC, an independent authority that scrutinized, cajoled, hector, and prosecuted. There were hundreds of motions, complaints, and other requests to enforce, modify or interpret. The Justice Department issued thousands of advisory letters. The court received over six thousand briefs. Thirteen groups of consolidated appeals were carried to a federal appellate court in Washington. The Supreme Court received half a dozen divestiture-related petitions for review...

A 1995 Justice Department proposal to grant limited relief to two local phone companies in Chicago and Grand Rapids occupied twice as much paper as the entire consent decree that broke up the national Bell System. This Son-of-Sam decree addressed network information, billing services, and customer lists. It devoted four paragraphs to regulations for marketing services to business customers and another three to marketing to residential customers. The Justice Department itself was to review and approve a written script used by Ameritech to sell interexchange service. Two paragraphs were required to spell out how Ameritech would list local competitors in its white pages.

⁵³ U.S. Department of Justice (1987).

The 1996 Telecommunications Act put an end to all this. It transferred authority over the key line-of-business restrictions to the FCC, and it established a process and timetable for getting rid of them all.⁵⁴

While some of the BOC requests were granted by the courts (typically the D.C. Circuit overturning Judge Green, who exercised a high degree of skepticism regarding the BOC filings), the activity generated by interest groups fighting for position created demand for judicial rulings rather than regulatory—or legislative—favors. This state of affairs was suboptimal in the opinion of incumbent representatives or senators. As the likelihood rose that the BOC petitions would be granted (i.e., the restrictions would be abolished), Congress' incentive to enter the rent seeking game (while there were yet rents to seek) increased. Importantly, this incentive was felt by incumbents of either party, unified by an interest in promoting greater campaign support from interest groups, as well as in fostering greater intimacy with corporate employers likely to be hiring after officeholders exited public life.

The upshot is that enacting the Telecommunications Act, moving the marketplace back to *Congress's* line-of-business restrictions, was a popular, bipartisan objective among legislators. This likely propelled legislation which had been stalled for, literally, decades. And we may now judge whether Congress's self-interested objective has been met.

The evidence suggests that it has. In both the 1996 and 1998 election cycles, federal political contributions by telecommunications firms rose both absolutely and adjusted for the overall rise in political giving, according to data supplied by the Center for Responsive Politics (Figure 8.) Indeed, in both categories (soft money and PAC donations) in both cycles, telecommunications spending increased. This 4 for 4 batting average could be achieved by random chance just 6 times in 100. Add to this quantifiable political gain the fact that the Telecommunications Act has provided a platform for an exceptionally newsworthy set of public issues, from the big ticket competitive issues discussed in this paper to the hot button social issues like in the act including TV violence (and the V-chip) and internet indecency. Even failings attributed (rightly or wrongly) to the act (say, cable rate increases) have afforded the opportunity for high-profile

⁵⁴ Huber (1997)

hearings and voluminous incumbent publicity. It is not particularly ambitious to label the Telecommunications Act close to an unmitigated political success.⁵⁵

VIII. GRADING ON THE CURVE

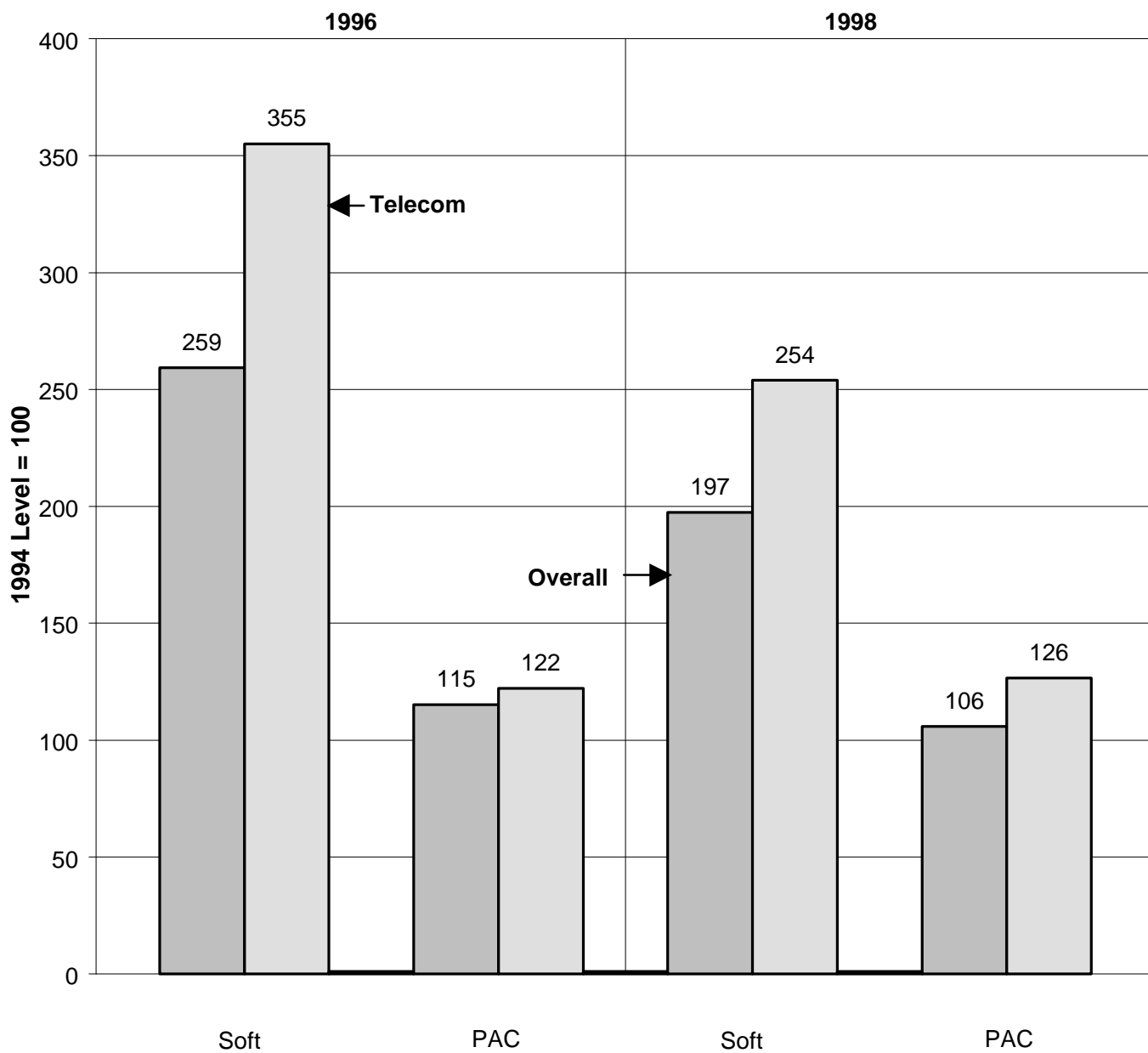
A sober assessment of the major economic provisions of the 1996 Telecommunications Act reveals that the legislation scores at the top of its class on standardized tests. In the principle markets the act reformed, prices are not rising in quality-adjusted terms, and increasingly customers are facing choices between service suppliers. More importantly, the capital markets—always looking to the future—indicate that these competitive forces will intensify. Billions of dollars are now betting that firms offering competitive local telephone and cable service will prosper and grow. Whatever the impatience justifiably exhibited with monopoly services in the interim, it must be pointed out that previous legislation—two comprehensive and much heralded Cable Acts in 1984 and 1992, for instance—never succeeded in producing the degree of local telecommunications service rivalry that now exists on the competitive fringe.

How important the 1996 legislation was in promoting current and looming benefits is a difficult question. Unfortunately, market forces are not labeled, *Made in the Act*. But having observed previous “reforms” produce demonstrably counter-productive impacts for consumers, it is telling that such problems have not yet arisen in the wake of this legislation. Indeed, the failings of the Telecommunications in promoting competition are likely to be found in its conservatism. The measure did not liberalize radio spectrum allocation nor move aggressively to promote long distance entry by the RBOCs. It mandated extensive “safeguards,” and led the FCC to micro-manage reforms so tightly that the leading U.S. regulatory economist, Alfred Kahn, has proposed “deregulating the process of deregulation.”⁵⁶

⁵⁵ Not entirely unmitigated, however. The Chair of the Senate Commerce Committee and key sponsor of the TA, Larry Pressler (R-SD), was the only incumbent senator defeated for reelection in 1996. His opponent raised the TA as a campaign issue.

⁵⁶ Kahn (1998).

Figure 8.
Soft Money and PAC Contributions in 1996 and 1998 Cycles



TELECOMMUNICATIONS ACT 3-YEAR TOTE BOARD		
<i>Area</i>	<i>Results</i>	<i>Comment</i>
Long Distance Competition	Zero	Every RBOC 271 petition denied.
Local Exchange Competition	Modest Success	Acceleration in CLEC revenues, growing to 5.0% of LEC total in 98-IV. CLECs attracting capital, and 5-year returns beat S&P 500.
Multi-channel Video Competition	Modest Success	DBS gains, and Ameritech and RCN emerge as large scale overbuilders. Competitors at 15% market share.
Telecommunications Mega Mergers	Success	Financial markets indicate that investors anticipate competition will intensify, as firms restructure for national brands competition.
Policymaking Competition	Strong Success	Telecom contributions to federal candidates and parties increases in 96 and 98 election cycles.

The cautious approach taken was political compromise *in action*—often heard in Washington as one word. But here action was taken to put the government explicitly on the side of competition, a bold move in markets where government has traditionally operated on the “natural monopoly” assumption. That the opportunity to legislate was sweetened by the lure of taking back the brisk regulatory business brewing in Judge Green’s courtroom does not diminish the reform, but helps to rationally explain it.

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