

Policy Analysis

No. 423

February 4, 2002

The Digital Dirty Dozen The Most Destructive High-Tech Legislative Measures of the 107th Congress

by Wayne Crews and Adam Thierer

Executive Summary

The past year was a difficult one for the high-technology and telecommunications sectors of the U.S. economy. Massive layoffs, plunging stock prices, dismal earning reports, bankruptcies, and a host of other problems plagued this market. Market mania and the general economic downturn were primary causes of the tech sector's woes. Once bad times hit, overinflated tech stocks experienced a meteoric fall.

It is worth considering whether some of the tech sector's troubles can be linked to the uncertainty caused by the threat of increasing regulation. Whereas legislative attitudes in previous sessions of Congress were hands-off in nature, the year 2001 saw policymakers introduce hundreds of bills that deal with tech policy matters.

Although very few of those bills were actually passed, the tech sector finds itself at an important crossroads: Will policymakers follow a hands-off model that stresses humility and regulatory restraint when dealing with cyberspace, leaving

most important decisions to market forces? Or will they revert to the command-and-control model that has long governed the telecom sector, with regulators molding the industry through endless intervention in order to satisfy a public interest that they themselves define?

As shown in this review of our picks for the 12 most destructive pieces of technology legislation introduced in the 107th Congress, there is good evidence that policymakers—whether through conscious design or not—are adopting the telecom regulatory paradigm for the tech sector. It appears that the tech sector may be pigeonholed into that paradigm simply because it offers a familiar set of rules and a bank of regulatory agencies that can be activated on command.

If that happens, it will be a grave blow to the Internet sector. Policymakers would be wise to reject this paradigm and instead let the Internet and cyberspace evolve with minimal federal intrusion and regulatory interference.

It is not unreasonable to ask whether at least some of the tech sector's troubles can be linked to the threat of regulation.

Introduction

To say that 2001 was a difficult year for the high-technology and telecommunications sectors of the U.S. economy would be a considerable understatement. Following a technology stock spree that included briefly catapulting a profitless Priceline.com to a value higher than that of United, Continental, and Northwest Airlines combined,¹ severance packages and pink slips became commonplace in the tech sector as the dot-com deathwatch kicked into full gear. The survivors of this bloodletting tried to put the best spin on their plunging stock prices and dismal quarterly earnings reports. But there is no hiding the fact that the tech sector is hurting.

Meanwhile, consumers of high-tech products and services are equally dispirited. Many complain that the competition and consumer choice they were promised has not materialized. Affordable high-speed broadband also remains a dream for most small companies and average households. And many other tech products or services (especially of the dot-com variety) failed to live up to their much-hyped expectations. While vulture auction houses benefit from selling the overindulgent wares of an industry gone south and employment websites see loads of traffic, the tech industry licks its wounds and wonders what happened.

Nothing happens in a vacuum, of course, and the tech sector's recent troubles are no exception. The overall macroeconomic picture for the U.S. economy in 2001 was not a good one. With the economy in a general downturn, demand for many tech products and services slacked off or never fully materialized, and new investment and innovation throughout the sector was put on hold. We have since said goodbye to dot-com darlings Pets.com, Toys.com, WebVan, and Kozmo.com.

Moreover, while the amazing stock returns and employment growth of previous years were a blessing for millions of investors and high-tech CEOs alike, the bubble was bound to burst. The general economic down-

turn merely facilitated this process, and did so with a vengeance, as tech sector stocks experienced a meteoric fall and ended up trading, quite literally, for pennies.

The news is not all bad, of course; venture capital investment and the number of companies funded are still considerably higher than they were 10 years ago.² But although the irrational exuberance of investors in past years and overall economic malaise of the past year certainly contributed to the tech sector's declining fortunes this year, it is worth considering the impact of the political or regulatory environment on this sector as well.

It is not unreasonable to ask whether at least some of the tech sector's troubles can be linked to the threat of regulation or even the legal uncertainty that continues to surround this sector. The past year saw a steady rise in the overall level, of legislative and regulatory activity dealing with tech or telecom policy matters. Hundreds of bills were introduced at the federal level, and thousands more were entertained by state and local governments. An exact bill count is difficult, given the definitional disputes regarding what exactly qualifies as technology-related legislation, but as of early December 2001, *National Journal's Technology Daily* listed almost 350 technology-related bills for the 107th session of Congress.³ Empower America's annual technology legislation survey listed more than 220 federal bills when it was released in the summer of 2001.⁴ Regardless of the exact count, by any available measure there has been a significant increase in the overall volume of legislative activity compared with previous years.

These bills dealt with a wide array of issues, including website privacy policies, Internet taxation, broadband deployment and diffusion, antitrust and competition policy, wireless spectrum issues, broadcast television and radio regulation, content controls, child protection, cyber-security, intellectual property, and Internet gambling. What is perhaps most remarkable about this legislative activity is not simply how many more measures were introduced than in previous years, or even the breadth of technical or legal

territory the bills attempt to cover, but just how much more regulatory in character many, if not most, of these bills have become.

Not only were there far fewer bills dealing with technology policy matters in previous sessions of Congress, but the earlier legislative atmosphere was far more hands-off in nature; there seemed to be more humility on the part of policymakers when they considered technology policy or Internet sector matters. Indeed, many leaders expressed genuine concern about the notion of regulating this exciting new sector and its many unfamiliar and complicated technologies.

But things changed markedly in 2001. Suddenly, it seemed, everything was on the table and open for legislative consideration. It was as if Congress had imposed a regulatory moratorium on itself that expired at the beginning of 2001, opening the door to legislate on anything under the high-tech sun. But while many more legislative measures were introduced and debated over the course of the past year, very few actually passed through Congress and were signed by the president.

And so today the tech sector finds itself at the important crossroads of two clear paradigms. The first is the earlier hands-off model espoused by many policymakers, which stressed humility and regulatory restraint. It was a vision guided by the notion that the Internet sector was best left to develop outside the political sphere; that it should be shaped mostly by market forces, not political edicts. In this vision, the voluntary interaction of producers and consumers determined what served the public interest.

There is another possible paradigm embodied by the older portion of the tech sector: that of the telecommunications industry. The telecom sector's history was molded at every turn by endless legislative and regulatory meddling, from the very creation of the AT&T monopoly to its breakup in the early 1980s and beyond. In this scenario, the unpredictable whims and dictates of lawmakers and regulatory bureaucrats determine what serves the public interest.

The danger today is that the old paradigm

of the past will be imposed on the Internet and cyberspace. Indeed, the primary threat raised by increased legislative activism is that policymakers are beginning to box the Internet sector into the same regulatory paradigm that has governed the telecom sector for 100 years. It is important to stress that this may not be happening by rational design. Rather, the Net sector may be pigeonholed into the more command-and-control-oriented regulatory paradigm of the past simply because that paradigm offers a familiar set of rules and regulatory agencies.

If that occurs, it will be an unmitigated disaster for the Internet sector, since the dangers associated with such increased cyber-statism and centralized planning are numerous. The cyber-statist vision rejects the rule of law by subjecting the industry to whims of bureaucratic elites and the regulatory community. It rejects the fundamental importance of property rights in networks and technologies and instead proposes to convert the Net into a giant commons. It requires constant regulatory intervention by substituting political processes for market processes.

Finally, and perhaps most troubling, increased federal meddling in this sector could politicize this very dynamic industry. It would be lamentable if the Net sector became the next broadcast industry, looking to Washington for special favors and permission to engage in new forms of business. Already, the past few years have seen an explosion in lobbying efforts by technology firms, which are opening and rapidly expanding lobbying offices in Washington. In addition, these companies are significantly increasing the amount of money they dedicate to political campaigns as well as inside-the-Beltway advertising and public relations battles. In a nutshell, the high-tech sector is becoming more comfortable in Washington circles.

Worse yet, there have already been calls by various parties (and sometimes the technology sector itself) to impose public interest regulation on this industry, or to insure just and reasonable rates for new services, or to subsidize certain services or technologies to

The primary threat raised by increased legislative activism is that policymakers are beginning to box the Internet sector into the same regulatory paradigm that has governed the telecom sector for 100 years.

An interventionist philosophy has crept into legislative proposals that are now being seriously entertained by members of Congress.

increase household or business penetration. This is the language of the past coming back to haunt the technologies of the future. And many of the bills introduced during the current session of Congress illustrate how this dangerous philosophy has crept into legislative proposals that are now being seriously entertained by members of Congress.

We have developed the following criteria to judge which of these many legislative measures presented the most serious threat to the high-tech economy:

1. Does the measure generally increase the scale and scope of government involvement in the telecommunications or technology sectors?
2. Does the measure substitute political and regulatory decisionmaking for the voluntary interaction of individuals, companies, and consumers?
3. Does the measure threaten to politicize this dynamic industry by creating programs or policies that make the sector increasingly dependent on Washington, or does it encourage them to look to Washington to solve problems before working out difficulties on their own?
4. Does the measure build on the failed public interest regulatory model of the past or simply box new industries and technologies into the legacy rules that broadcast industry, telephone, or cable industry faced in the past?
5. Does the measure pose a threat to or greatly diminish the individual liberties of American citizens to view or listen what they want, when they want, however they want?

Using those criteria, the following 12 bills have been selected as the most destructive pieces of high-technology legislation proposed so far in the 107th Congress:

1. S. 1364, Telecom Fair Competition Enforcement Act: Proposes another divestiture or break-up of the local telecommunications network in an attempt

to encourage competition.

2. S. 792 and H.R. 2246, Media Marketing Accountability Act of 2001: Would impose federal standards on electronic advertising and marketing activities, which would be tantamount to government censorship.

3. S. 512 and H.R. 1410, Internet Tax Moratorium and Equity Act: Would authorize a multi-state tax cartel for the purposes of collecting sales taxes on electronic commerce transactions.

4. H.R. 718, Unsolicited Commercial Electronic Mail Act of 2001: Would regulate commercial e-mail solicitations.

5. H.R. 2724, Music Online Competition Act: Would seek to expand the licensing of online music through a requirement that the same terms be offered to all licensees.

6. Security Systems Standards and Certification Act (draft legislation): Would mandate that digital devices contain copy protection technology, or digital rights management (DRM) tools, to protect intellectual property. The bill would also make it illegal to remove or disable the DRM technology.

7. S. 927 and H.R. 1837, Mobile Telephone Driving Safety Act and Call Responsibly and Stay Healthy (CRASH) Act: Would impose constitutionally questionable mandates on states by demanding that they prohibit individuals from using cell phones while operating vehicles. States that failed to implement such a ban would lose a portion of their federal highway funds.

8. S. 88 and H.R. 267, Broadband Internet Access Act: Proposes the creation of a tax credit regime to spur broadband diffusion, particularly in rural areas.

9. H.R. 1697 and H.R. 1698, Broadband Competition and Incentives Act and American Broadband Competition Act: Would impose increased antitrust oversight of the telecom sector.

10. H.R. 237, Consumer Internet Privacy Enhancement Act: Would provide consumers with the ability to opt out of

information sharing by online firms.

11. H.R. 556, Unlawful Internet Gambling Funding Prohibition Act and H.R. 3215, Combating Illegal Gambling Reform and Modernization Act: Would outlaw the use of certain banking instruments for purposes of conducting online gambling.

12. H.R. 1531, Cell Phone Service Disclosure Act: Authorizes the FCC to establish regulations governing cellular industry quality.

These bills are reviewed below.

Issue 1: A Second Divestiture for Telecommunications

Sponsored by Sen. Ernest Hollings (D-S.C.), the Telecommunications Fair Competition Enforcement Act (S. 1364) authorizes numerous fines and penalties for noncompliance with the Telecommunications Act of 1996, such as \$10 million for certain violations of the act's infrastructure-sharing provisions, plus \$2 million for each day the violation continues. More importantly, if violations continue, S. 1364 would force the Regional Bell Operating Companies to structurally separate their wholesale (wires and switches) and retail (business services) functions into distinct companies in an effort to promote competition within the local telephone exchange, or local loop.

S. 1364 ranks as the single most destructive digital economy bill of the year for a very simple reason: It would do more than any other piece of legislation to destroy the foundations upon which a good portion of the digital economy rests. S. 1364 would set back telecommunications policy 20 years and constitute possibly the most radical, proregulatory measure to come along for any American industry in decades.

The Hollings bill garners this unflattering distinction by pretending that structural separation of the Regional Bell Operating Companies is simple regulatory surgery that provides the magical cure to the competitive woes of the local telephone system. By forcing the Bells to separate their wholesale (wires and switches) and retail (business ser-

vices) functions into distinct companies, America will once and for all end excessive market power in the local telephone exchange and ensure that rival companies have access to embedded networks on fair and reasonable terms and rates. Or so the theory goes.

In reality, round two of the Baby Bell breakup will be every bit as gut wrenching as the divestiture the industry underwent in the early 1980s—the famous breakup of AT&T that created the Baby Bells. That first round of divestiture broke the telephone system into two primary components—long distance lines and local loops—in the hope that competition could be encouraged in the former and monopoly contained in the latter.⁵

The results have been somewhat mixed, with consumers enjoying a respectable degree of long-distance competition, but limited options in the local market. The Telecommunications Act of 1996⁶ was supposed to change the latter part of the equation by opening local Bell networks to resale competition, but mandated infrastructure sharing has proven to be a bust.⁷ Competitive telecom resellers didn't bother building their own facilities to directly compete against the Bells, but instead looked to hitch a free ride on the Bells' existing networks—hardly genuine competition.⁸

So along come the proponents of a second divestiture for telecommunications with promises that if we just take one more stab at slicing the Bells' empire in two, everything will be fine.⁹ Policymakers should think twice about the logic of another divestiture for telecom, however, and bear a few things in mind when faced with such proposals.

First, structural separation is hardly simple regulatory surgery. It is more like amputation, and, in this case, the proposed surgery is for a patient who doesn't need any appendages removed in the first place. The American telecommunications system is far more complicated than many policymakers appreciate. Forcing the Bells to split their system in two would be a very messy and drawn-out process, taking years to complete and accomplishing

Structural separation is hardly simple regulatory surgery. It is more like amputation, and, in this case, the proposed surgery is for a patient who doesn't need any appendages removed in the first place.

Facilities-based competition will not develop as long as the local exchange market is riddled with inefficient subsidies that distort pricing signals.

nothing more than a steady flow of work for the armies of lawyers, engineers, economists, and consultants that would be brought in to iron out the ugly details.

Second, forced divestiture is not likely to spur any real competition or investment. Although splitting the Bells in two might make it a little easier for regulators to encourage the same sort of freeloading by rivals that the Telecom Act's open access provisions have fostered, that isn't the genuine competition consumers are looking for. America needs competition in network creation, not just more companies using the same old copper lines to deliver plain vanilla telecom services.

Third, divestiture proponents conveniently ignore another troubling issue associated with splitting the Bell networks into wholesale and retail components: Who will maintain and upgrade the last mile to our homes and businesses after divestiture? Turning the local loop into the equivalent of just another lackluster public utility service not only stamps out investment incentives but also leaves unanswered some troubling questions about future network management.¹⁰

Finally, breaking up the nation's communications grid would have profound ramifications for the economy as a whole. The harm that would come to the Bells and their millions of employees and shareholders is obvious. But consider the impact on communications equipment providers, computer companies, broadband application and content providers, and the many other sectors and businesses that depend upon a stable communications industry.

If legislators really want to encourage increased competition in local telephone markets they would be wise to first eliminate the highly illogical rate subsidies that continue to artificially depress the price of local telephone service well below actual costs. Gartner Dataquest has estimated that the average cost of providing basic residential phone service in America to be roughly \$20 per month.¹¹ Yet, many states freeze rates at or below \$15 per month. As Gartner analysts Ron Cowles and Alex Winogradoff point out:

It's not difficult to see that competitors will not be attracted to markets where they take a loss on each unit sold, regardless of the services they bundled together. . . . Even with [resale] discounts, the potential margins are minimal. It's also not hard to understand that it is the regulators themselves . . . that have created this regulatory barrier to competitive entry.¹²

Facilities-based competition will not develop as long as the local exchange market is riddled with such inefficient subsidies that distort pricing signals. If local regulators told McDonalds to offer Big Macs for half their actual cost and offered them subsidies to do so, would Burger King or Wendy's have ever come to town? Not likely. Sadly, however, proposals to end price supports for inexpensive telephone service are treated as a taboo topic in Congress and especially within the state and local regulatory community. Politicians have come to believe that Americans have the equivalent of an inalienable right to cheap local phone service. But what makes for good politics rarely makes for good economics, and if policymakers refuse to allow companies to charge the market price for existing or new service offerings, genuine competition will never come to the local loop.

Despite this, competition is slowly coming to local telephone markets, largely through the explosion in demand for wireless cellular and satellite-based services. With time and further deregulation and subsidy reform, consumers will be offered a cornucopia of communications choices as the convergence of wireless services, digital technologies, and computer-driven systems overtake the technologies and networks of the past. Hare-brained ideas like the divestiture proposal outlined in S. 1364 will not get America there any faster.¹³

Issue 2: Electronic Advertising and Marketing Censorship

Sponsored by Sen. Joseph Lieberman (D-Conn.) and Rep. Steve Israel (D-N.Y.), the

Media Marketing Accountability Act of 2001 (S. 792 and H.R. 2246) outlaws marketing adult-rated motion pictures, music recordings, or electronic games to children unless the producer or distributor adheres to a voluntary self-regulatory system that comports with criteria established by the Federal Trade Commission.

The bill also grants the FTC new enforcement powers and requires the agency to study and report to Congress on marketing practices of the motion picture, music recording, and electronic game industries with respect to adult-rated products, including the identification of particular producers and distributors engaged in such practices.

The MMAA proposes to clean up the entertainment industry by threatening to impose stiff fines on companies that market or advertise programs or materials to children that were rated inappropriate by the industry for viewing or listening to by children. Although the entertainment industry uses a variety of voluntary rating techniques for movies, music, and video games, many legislators argue that the industry does not do enough to shield children's eyes and ears from adult-oriented fare. Consequently, the act would grant new powers to the FTC to impose sanctions on entertainment companies that allegedly market adult-oriented fare to children.

There are certainly good reasons for society to be concerned about the effect of violent or sexually explicit programming or materials on children. Many child development experts and parents fear that increased exposure to such programming or materials is having a desensitizing influence on youth.¹⁴ Some child psychologists have even suggested a link between increased exposure to such materials and aggressive or even violent attitudes and actions by children. Although academic evidence appears inconclusive and sometimes contradictory at this time, a reasonable case can be made that increased exposure to such materials can have a negative influence on a child's development. At a minimum, it seems obvious that it is difficult

to make an argument that increased exposure to such materials actually improves a child's mental development or behavior.

But even if policymakers and the general public come to believe that such materials are harmful and the medical community produces evidence that supports this contention, it does not necessarily mean that federal regulation is the solution. As David E. Rosenbaum of the *New York Times* notes, some serious social problems in America may not have good legislative solutions. A case in point could be sex and violence in entertainment.¹⁵

Indeed, it seems that if ever there was a task better left to families to decide on their own, it is what to listen to, watch, or read. Legislative or regulatory efforts to curb exposure to violent or sexually explicit media are tantamount to government playing the role of surrogate parent. Parents, not federal bureaucrats, should decide what their children do and do not see. After all, one-size-fits-all forms of content regulation are unlikely to recognize that different parents have different definitions of what constitutes acceptable fare for their children.

For example, are the plays of Shakespeare too violent for children? Certainly some contain a level of violence that many parents would deem inappropriate for their kids, especially if produced for television. Other parents, however, would not hesitate to encourage their children to read or view Shakespeare's works. Likewise, many of the entries in William Bennett's best-selling *Book of Virtues*, or even the Bible, include violent content that parents might consider unsuitable for children if produced for television. Consider the Bible story in which 42 children are mauled by she-bears for taunting Elisha (2 Kings 2).

Whether or not something is offensive is a subjective judgment. Few people would call for censorship of the Bible or of Bennett's *Book of Virtues*.¹⁶ Parents who wish to can censor as the need arises. And even if entertainment companies were to attempt to direct market potentially offensive programming to kids, that strategy wouldn't work very well

Many of the entries in William Bennett's best-selling *Book of Virtues*, or even the Bible, include violent content that parents might consider unsuitable.

Government should not opine on—let alone legislate—which books, television shows, or web pages we view or how they are marketed to us.

unless parents concurred or turned a blind eye. After all, they're generally the ones who have the money and make the decisions in the household.

Government should not opine on—let alone legislate—which books, television shows, or web pages we view or how they are marketed to us. Nor should government utilize public shame against those it happens to dislike, a policy Bennett favors, as did Senator Bob Dole in a very prominent public tirade against Hollywood. All this is the responsibility of parents and guardians exercising their inalienable rights to make their own moral choices in the free marketplace. Parents who are competent to elect their government officials should be competent enough to control their children's viewing and listening habits.

Besides being a slap in the face against personal and parental responsibility, the MMAA presents a variety of First Amendment concerns. The bill imposes government fines or regulation if adult-oriented content is marketed to children. Since, as discussed above, those judgments are subjective and open to interpretation, government officials would be engaging in de facto censorship of electronic media, which runs afoul of the First Amendment.

Second, the bill targets specific forms of media or entertainment outlets (movies, music, and video games), but seemingly ignores others (books, magazines, newspapers). This reflects a long-standing but unjustifiable trend by government officials to accord electronic media lesser First Amendment respect and protections than print media. But if government can regulate or censor the content of movies or music, why not books or newspapers? If government officials mandate a ratings system for Kenneth Branagh's faithful 1994 big screen adaptation of Mary Shelley's horror classic *Frankenstein*, then shouldn't regulators place a rating on Shelley's 1818 book to be consistent?

The First Amendment, of course, knows no such distinction between the media of speech, communication, and entertain-

ment.¹⁷ But the MMAA would perpetuate the illogical distinction between traditional print media and the more modern forms of electronic media like television and radio. Such distinctions could easily spill over onto the Net. So while viewed by many as little more than political grandstanding given its limited chances of passing constitutional muster with the Courts or making it out of Congress at all, the MMAA poses a very significant threat to the high-tech sector.¹⁸

Issue 3: An Internet Tax Cartel

Sponsored by Sen. Byron Dorgan (D-N.D.) and Rep. Ernest Istook (R-Okla.), the Internet Tax Moratorium and Equity Act (S. 512 and H.R. 1410) would grant state governments the authority to enter into multi-state compacts for the purposes of taxing interstate commerce over the Internet and from other sources, such as catalog and mail order sales. The bills would require states to agree on a uniform system for imposing sales and use taxes on such commercial transactions and demand the simplification of tax rates and definitions. Once the states devised uniform definitions for goods and services, uniform procedures for the treatment of exempt purchasers, uniform rules for attributing sales to tax jurisdictions, and uniform auditing procedures, S. 512 and H.R. 1410 would eliminate any constitutional impediments standing in the way of state and local taxation of interstate commerce. Finally, the bills would continue the prohibition on Internet access taxes through Dec. 31, 2005.

In November 2001, Congress passed legislation extending the existing moratorium it had put in place under the Internet Tax Freedom Act of 1998 for another two years.¹⁹ President Bush signed this moratorium extension into law on November 28.²⁰ The moratorium, which has been the subject of intense and often acrimonious debate, merely prohibits state and local government from imposing multiple or discriminatory taxes on the Internet as well as taxes on Internet access. Importantly, and contrary to popular

opinion, the moratorium does not prohibit state and local governments from attempting to collect sales taxes on goods purchased over the Internet.

What currently ties the hands of state and local governments is not the act, but 30 years of Supreme Court jurisprudence dealing with remote (i.e., interstate) commerce. Supreme Court cases such as *National Bellas Hess v. Illinois* (1967), *Complete Auto Transit, Inc. v. Brady* (1977), and *Quill v. North Dakota* (1992) established the principle that states can only require firms physically present in their jurisdiction to collect taxes on their behalf.²¹

Those decisions, which have never been overturned or modified by Congress, provide a sensible guideline for taxing remote sales. In essence, the logic of the Court's jurisprudence can be summarized by the classic phrase used by the Founders: No taxation without representation. More specifically, a state or local government may only place tax collection obligations on companies or consumers that receive something in return for those taxes. Forcing companies to collect taxes for jurisdictions they receive few benefits from would be blatantly unfair and massively inefficient given the complexity of the sales tax system in America (currently over 7,000 taxing jurisdictions with a multiplicity of rates and product definitions).²²

That is why interstate mail order and catalog companies are not required to pay taxes in states where they have no physical commercial presence, or nexus as the Court refers to it. Companies are required to collect taxes in only the states where they have tangible business operations. Their customers, however, are expected to remit taxes to their state or local governments. That compliment to the sales tax is called the use tax, but enforcement remains problematic, if not impossible, given the difficulty associated with tracking direct-to-the-door sales.

Largely because of use-tax collection problems, many state and local officials have undertaken a new effort to collectively simplify their sales tax systems. Specifically, they hope to establish a multistate compact to jointly set

sales tax policies such as rates, definitions, and collection obligations. Eventually they hope that simplification will render the Supreme Court nexus requirement moot. The effort has been dubbed the Streamlined Sales Tax Project, and its promoters say it is the pro-states'-rights solution to the Net tax debate.

But one very large impediment stands in the way of this state-led effort—namely, the U.S. Constitution. The Commerce Clause (art. 1, sec. 8, clause 3) and the Compacts Clause (art. 1, sec. 10, clause 3) prohibit states from entering into formal compacts. If state and local officials hope to establish a uniform plan and a collective compact that imposes taxes on what is so clearly interstate commerce, they must first receive the blessing of Congress. The Internet Tax Moratorium and Equity Act would grant the states that permission. If Congress passes the bill, it will give state and local governments a green light to launch a European-Union-style tax collection system and establish the equivalent of a national sales tax on interstate commerce.

There are better ways to equalize tax treatment and improve consumption tax effectiveness. One alternative would be a savings-exempt income tax, under which taxpayers could exempt all savings from their taxable income, resulting in uniform taxation of the remaining consumption base.²³ This option makes a great deal of sense, since almost everyone acknowledges the difficulty of collecting sales taxes in a digital age.

America's sales tax system is a relic of the Great Depression era, with taxes falling squarely on the purchase of tangible goods sold over the counter. As America has shifted to a service-based economy, that shift has exposed a gaping hole in the sales tax system, since almost no services are covered by the system.²⁴ The rise of intangible forms of digital commerce make this tax enforcement problem even more difficult to remedy. And the endless list of politically favored goods that receive exemptions from the sales tax (agriculture, food, clothing, etc.) only worsens this situation. This begs the question: Why continue to apply such an outdated, inefficient, and increasingly unworkable tax

Forcing companies to collect taxes for jurisdictions they receive few benefits from would be blatantly unfair and massively inefficient.

Spam is a relentless pain, and ISPs have every right to block it ruthlessly—after all, their servers are their own property.

system at all? A savings-exempt income tax would be one way to solve the problem by ensuring that all forms of consumption activity were captured by a tax.

But despite its many deficiencies, proposals to eliminate and replace the current sales tax system typically encounter hostile resistance. A second-best option would be to switch the sales tax collection methodology to a pure origin-based system. Nothing prevents states from leveling the playing field on the sales tax front, since each state has the legal authority to tax all transactions that originate within its borders. In fact, that is exactly how state and local governments currently collect sales taxes for in-state sales to in-state consumers—by imposing the rate and definitions of the jurisdiction in which the vendor makes the sale over the counter. But states choose not to tax sales that in-state businesses make to out-of-state buyers in the same way. States purposefully exempt exports from sales taxes and instead attempt to impose sales taxes on imports from other states.

It would be preferable for states to treat all merchants the same by having them collect the state or local sales tax regardless of where the buyer lives. This would end the confusion and complexity associated with attempts to impose and collect use taxes on imports from out-of-state. But tax officials decry such an origin-based system, fearing that a few low- and no-tax states might lure businesses away and create a race to the bottom in terms of overall tax rates. In reality, however, this is just healthy tax competition. Moreover, Congress recently codified into law an origin-based tax methodology for the taxation of cellular telephone service, which like electronic commerce, is clearly interstate commercial activity.²⁵

The bottom line is that economically efficient and constitutionally sensible alternatives exist to solve the interstate sales tax dilemma policymakers are trying to deal with under the guise of the Streamlined Sales Tax Project, and the Internet Tax Moratorium and Equity Act. The multistate tax cartel solution these efforts envision presents the

worst of all possible solutions to the issue.²⁶

Issue 4: Regulation of Commercial E-mail Solicitations

The Unsolicited Commercial Electronic Mail Act of 2001 (H.R. 718), was sponsored by Rep. Heather Wilson (R-N.M.), and the Senate version of the bill, the CAN SPAM Act of 2001 (S. 630), was sponsored by Sen. Conrad Burns (R-Mont.). The House Energy and Commerce Committee markup of the bill requires that senders provide valid identifying information, provide identifiers indicating that the message is unsolicited, and offer the opportunity to opt out of future transmissions. The bill allows ISPs to set policies that others must follow and to block bulk e-mail in good faith; and would allow recipients and ISPs to sue spammers. A narrower spam bill, the Anti-Spamming Act of 2001 (H.R. 1017), was introduced by Rep. Robert Goodlatte (R-Va.).

It is easy to see why spam is widely used by the unscrupulous. It's as easy to send a million e-mails as it is to send one, and the spammer gets to pass the costs on to ISPs and users. Although estimates have said e-mail spam accounts for anywhere from 10 percent to one-third of all e-mail, a recent study by the European Commission indicates that spam has declined since its heyday between 1995 and 1998.²⁷ But it's still a relentless pain, and ISPs have every right to block it ruthlessly—after all, their servers are their own property.

Some in Congress want to legislate a solution, of course. The Unsolicited Commercial Electronic Mail Act of 2001 (H.R. 718), introduced by Rep. Heather Wilson (R-N.Mex.), was narrowed in the House Judiciary Committee to criminalize bulk e-mail that contains falsified subject headers or source e-mail addresses and to require that sexually oriented spam be identified as such. Rep. Robert Goodlatte's (R-Va.) Anti-Spamming Act of 2001 (H.R. 1017) would outlaw unsolicited e-mail that falsifies header or routing information, as well as outlaw the sale or distribution of spamware programs that aid such concealment. The competing versions

will be reconciled by the House rules committee before floor action.²⁸

But in the debate over this outpouring of spam, it's important to remember that, setting aside the most egregious and offensive solicitations, the optimal amount of unsolicited commercial e-mail isn't necessarily zero for everybody. Sometimes, commercial e-mail is unsolicited, but tolerable or even welcome. And unsolicited noncommercial e-mail is typically welcome. Legislation, therefore, might unnecessarily stifle many beneficial forms of e-mail and e-commerce transactions.

Businesses that sell legal and legitimate products have as much right to use e-mail as anyone else, unless the sender is breaking a contract made with an Internet Service Provider that prohibits bulk mailing. Malicious commercial mail is aggravating, particularly when the sender is peddling fraudulent merchandise or impersonates somebody else in the e-mail's header information. Those behaviors should be punished.

Legislation will be largely unenforceable as far as the most egregious offenders are concerned, since many can relocate offshore.²⁹ The law will instead create legal and regulatory hassles for small businesses trying to make a go of legitimate e-commerce, or for mainstream companies like, say, Amazon and Sears, which are not spammers. Increasingly, legitimate companies are embracing permission-based, opt-in e-mail standards, which means people don't receive e-mail from them unless they sign up for it.³⁰ This opt-in trend also is appearing in Internet-connected cell phones.

To limit spam, the basic instructions to Internet users still apply: don't respond to spam and don't post your e-mail address in chat rooms or on the web (or set up a junk e-mail account if you do). Deal with only reputable companies that repudiate spam. Because of the efficacy of self-help, legislators are rethinking their rapid embrace of legislative solutions. A bill of the same title as H.R. 728, sponsored by Rep. Wilson, passed the House 427-1 in the 106th Congress but was never voted on in the Senate. Rep. Zoe Lofgren (D-Calif.), who had supported the legislation

in 2000, said at a House Judiciary hearing, "I question whether this is an appropriate area for legislation at all. . . . I think it's because people know how to deal with it now."³¹

One way of dealing with spam is through e-mail filtering, which is increasingly changing the default from today's "everything comes in unless you say 'no'" to "nothing comes in unless you say 'yes'" (i.e., only mail from recognized and approved e-mail addresses). That standard is particularly appropriate for children's e-mail accounts.

In this vein, "handshake" systems capable of totally blocking spam are emerging.³² When an e-mail message goes to a recipient who participates in a handshake system, the system itself automatically responds to the sender behind the scenes, asking for a unique reply. If the sender responds, the e-mail is allowed through, and the sender is added to the "friends" list and need never go through the process again. Since the most offensive spam is sent by automatic bulk mailing programs that aren't capable of a reply, spam no longer appears in the inbox.

Mandatory identifiers for commercial e-mail, which would allow ISPs to increasingly shift some of the costs of commercial e-mail back to the sender, could be another means of addressing the spam problem.³³ Ultimately, technologies that allow the charging of delivery fees that are shared with the ISP could represent the beginnings of e-mail postage.

As the market moves toward solutions, a legislative substitute can also create considerable chaos:

1. Spam is difficult to define. What, exactly, counts as spam?
2. Spam legislation can harm free speech and anonymity of individuals, not just misbehaving businesses.
3. Federal immunity for Internet Service Providers to police spam will distort emerging online commerce.
4. Cumbersome spam legislation can harm proliferation of services across newer technologies like Instant Messaging.
5. Spam legislation lays the groundwork for

Businesses that sell legal and legitimate products have as much right to use e-mail as anyone else.

It is not apparent what ultimately will count as unsolicited or commercial e-mail, and the legislative definition could expand inappropriately.

- ill-considered privacy legislation.
6. Unreasonable federal penalties for spam create the opportunity for mischief and will harm online commerce.

It is not apparent what ultimately will count as unsolicited or commercial e-mail, and the legislative definition could expand inappropriately. For example, many informational newsletters contain embedded ads or link back to for-profit websites. Other questions might include the status of political or nonprofit bulk e-mailings.

Banner ads on the web have failed as a means of sustaining many dot-coms, so some companies have embraced pop-up ads. But such pop-up ads might become suspect in the aftermath of spam legislation: they're not e-mail and wouldn't be affected by spam legislation proposed thus far, yet they are unsolicited and commercial.

At bottom, what's being proposed with spam legislation is the further regulation of business *communications*. Such regulation is risky, because marketing—one way or another—will be required for the proliferation of new services delivered across platforms like instant messaging and the emerging wireless web on handhelds and cell phones.

Another issue with some proposed legislation is that it would grant ISPs powers to decide what is spam and to unilaterally block it with good faith immunity and sue the spammer. It's appropriate for consumers and ISPs to effect complete blackouts from spammers if they like; computers, wires, servers and routers are private property, after all. But it's not necessary to federalize such contracts. The fact is, some ISPs are spam-friendly. Legislation, and its consequent flurry of litigation, should not come between what are complex relationships between companies, users, and well over 5,000 ISPs. That could easily lead to the blockage of legitimate commercial transactions consumers want—some of which will resemble spam—or the pointless blocking out of smaller competing ISPs from which commercial e-mail may happen to originate.

Also, unreasonable per violation financial penalties that exceed the actual harm done by

the typical spam would create incentives for people to go on spam hunts, looking for evil commercial solicitations embedded within every e-mail. That will keep many businesses out of Internet marketing altogether, fearful of the risks.

Finally, legislative bans on false e-mail return addresses, as well as bans on software capable of hiding such information, have worrisome implications for free speech. Anonymous speech is a cornerstone of our republic: After all, Thomas Paine signed *Common Sense* "An Englishman," and the *Federalist Papers* were signed with a pseudonym. It just happens to be the case that the very techniques that facilitate spam can also protect individuals' identity. As strange as it may sound, spamware is a means by which individuals can create the anonymous flyer of today. Individuals must retain the right to safeguard their anonymity even in (or perhaps especially in) a mass-communications tool like e-mail.³⁴ Especially in an era in which so many people are concerned about online privacy, legislation that impedes anonymity and efforts to protect privacy would be a puzzling move.

In the perfectly understandable desire to make it difficult to send unsolicited mail, it is all too easy for us to hamper solicited mail, legitimate commerce, emerging Internet communications methods, and free speech. Meanwhile, spam will continue pouring in from overseas.³⁵

Issue 5: Compulsory Licensing of Online Music

Sponsored by Rep. Rick Boucher (D-Va.) and Rep. Chris Cannon (R-Utah), the Music Online Competition Act (H.R. 2724) seeks to jump-start competition in the digital music market. Recording companies that license digital music would be required to do so on a nondiscriminatory basis, offering similar prices and terms to all who wish to broadcast that music. Webcasters would be protected from some lawsuits, and procedures for obtaining broadcast rights to compositions would be streamlined.

As was famously illustrated in the Napster

dispute, record companies have been disinclined to allow consumers to download copyrighted music from the Internet. That aversion has generated calls from digital media services for compulsory licensing: they hope to force record companies to share music on government-set terms if negotiation doesn't work.

Politicians such as Sen. Orrin Hatch (R-Utah) have reluctantly warned that mandatory licensing of music may be invoked as a last resort against stonewalling record companies, and prominent academics, notably Lawrence Lessig, have endorsed compulsory licensing.³⁶ A new step in this direction is found in provisions of MOCA.

The bill is largely a response to MusicNet and pressplay, competing record-company-backed consortia set up to offer their catalogs over the web. MOCA is the "lite" version of compulsory licensing: MusicNet or pressplay need not license songs to any third party; but if they do, equal terms must be granted to everyone.

The embrace of forced licensing is misguided. Digitization presents an opportunity, not to expand the already extensive regime of compulsory licensing regulation, but to move beyond it. As a backdrop to the compulsory licensing debate, an interesting academic dispute rages today over whether intellectual property should be protected at all in the digital age. Setting that aside, what ought to be rejected is the idea that politicians should unprotect intellectual property. Forced sharing that supercedes or negates private deals creates a nonmarket environment in which one is obligated to make it easy for competitors. Innovation suffers under such regulation.

Moreover, compulsory licensing could have the opposite of the intended effect in the long run. If the bill's provisions were widely applied to all future licensing deals, they could thwart new companies that might otherwise enter the music-making and distribution business, locking in today's market structure. Interference with selective licensing and promotional arrangements could dissuade newcomers from establishing competing labels.

Compulsion should not be part of the mix today as thousands strive to create the celestial jukebox (and library and movie theater) of tomorrow. Compulsory licensing—and its attendant regulatory price-setting—is rooted in the perception that it's just too difficult for interested parties like owners and licensees to agree on terms or to gauge usage. But as University of California, Berkeley, professor Robert Merges has argued—sometimes, private associations can overcome licensing bottlenecks.³⁷ Today, given the proliferation of electronic technologies that make it easier to track files and communicate, the case for compulsion is even less defensible.

Calls for compulsory licensing aren't based on market failure in the sense of an inability of willing parties to come to terms or measure usage, but rather a desire to force unwilling parties to relent. In the extreme, compulsory licenses mean government price setting, rate scales, and adversarial lobbying that frustrates what might otherwise be a torrent of voluntary and diverse contractual business deals. Without mandatory licensing, pressures to negotiate voluntary deals are maximized. In the long run that's better than having competitors campaign for artificially created markets and form trade associations to lobby Washington, provoking opposition rather than partnerships.

The goal since the digital upheaval of copyright has been to get artists and composers paid. Opposing factions agree on that, but disagree over whether intermediaries (like record companies) should get paid. But here especially, it's better to allow the market to work (and perhaps even bypass the middleman as the Internet is famous for doing) than to risk locking in the existing order through forced licensing of the existing catalog of music.

No voice in the sky proclaims that producers, artists, composers, retailers, and consumers must deal with existing record companies. If those companies' terms are as bad as many claim, we could be better off with a truly competitive infrastructure than with a regulated version of the existing structure—even if the

Compulsory licenses mean government price setting, rate scales, and adversarial lobbying that frustrates what might otherwise be a torrent of voluntary and diverse contractual business deals.

Just as technology offers an opportunity to move beyond compulsory licensing, it can potentially replace political protection of copyright with market-oriented protections.

growth of competition takes time. Digital distribution does give producers and artists the option of avoiding the old order and controlling their copyrights, which should be attractive given that artists often claim that they are ripped off by record companies. Unfortunately, companies like MP3.com that could help create that competitive environment by focusing on tomorrow's artists and disgruntled major-label refugees, are better known for seeking copyright infringement immunity for hosting copies of users' CDs. They directly provoked the wrath of the record companies, when an emphasis on the future might have spurred more favorable deals.

Just as technology offers an opportunity to move beyond compulsory licensing, it can potentially replace political protection of copyright with market-oriented protections. Digital Rights Management technologies are those by which companies seek to copy-protect their content with software code or even hardware. But compulsory licensing can make that impossible to do by overruling the use of copy protection technology, or by mandating release of content before protections are market-ready. Mandatory sharing that effectively requires master copies to be made available can stand in the way of the development of private intellectual property protection.

For example, the Twenty-First Century Distance Learning Enhancement Act would allow libraries and schools, for distance learning purposes, to post copyrighted materials on the Internet, without additional payments. Fair use considerations are important, but the Internet is not a secure realm, and mandatory sharing of any kind can open potential loopholes that might allow the posting of unprotected master copies. Similarly, the Music Owners' Listening Rights Act sought by embattled MP3.com would have mandated that online companies could store CDs and allow users to download the tracks individually, thereby immunizing such online services from infringement lawsuits.³⁸ That's unquestionably an endgame all would want—but the legislation might have interfered with DRM experimentation

if it facilitated the release of unauthorized MP3s across the Net. DRM is a market alternative to legal copy protections, but mandatory licensing can be a barrier to it, and can thus create a barrier to evolving alternatives to legal copy protections. Moreover, compulsory licensing may not make sense for downloads, since those are permanent copies.³⁹ So allowing for flexibility in the evolution of distribution techniques is imperative.

Ironically, voluntary collaborations by record companies to cross-license digital music—which represent a proper market alternative to mandatory licensing that seeks to accomplish the same kind of broad-based licensing—have incurred antitrust scrutiny. MusicNet and pressplay are now subjects of a Department of Justice investigation of alleged monopoly power.⁴⁰ Boucher and Cannon are themselves concerned that MusicNet and pressplay together would own 80 percent of the world's music catalog, and thereby wield monopoly power over distribution and cross-licensing of content. But the complaint of music lovers until now has been that record companies *wouldn't* cross-license, which would force users to subscribe to more than one network. (Recall that one-stop shopping was part of the reason for Napster's popularity.) Compulsory licensing schemes that have trustbusting as a goal can suffocate nascent voluntary efforts that provide the universality so actively sought. Fears of an 80 percent market share are overblown. There's little need to fear monopolization of *entertainment*, a non-depletable good. Usually, when we think about excessive market power, it is with respect to scarce, tangible goods, but as proponents of file sharing point out, the concept of scarcity has less relevance for intellectual property and entertainment.

In the final analysis, the foot-dragging of record companies may be due not only to the fear of Napsterization of their content, but to the desire to wait out broadband deployment. Most music is still sold offline (at places like Wal-Mart), which minimizes the urgency for record companies to embrace the web. But change will become necessary as

broadband access becomes universal and record companies are forced to sell downloads and streams, rather than plastic disks. Presumably, that is what MusicNet and pressplay are all about. They will need to charge realistic prices for their content and do a better job implementing micropayments over the Internet.

The licensing terms that define relationships in this emerging marketplace should be allowed to evolve along with the Internet itself, not be specified in advance by politicians. Record companies' reluctance to digitize music catalogs is only a transitional problem. If the political path is chosen, forced licensing may not stop with music; mandated contracts for e-books and movies could be next.

Incentives for producers, composers, artists and rights holders to distribute copyrighted materials won't always mesh. But setting up an artificial digital marketplace grounded in force and mistrust isn't the answer. Digital distribution and the market institutions it can spawn (even monopolistic ones like MusicNet and pressplay) will respond to incentives more efficiently and effectively than to adversarial sharing requirements. The celestial content of tomorrow can be hampered if regulatory interference impedes strategic partnerships, strategies, and competing business plans.⁴¹

Issue 6: Mandatory Digital Rights Management

The proposed Security Systems Standards and Certification Act (draft legislation),⁴² sponsored by Sen. Ernest Hollings (D-S.C.), would prohibit the sale of digital devices that do not contain copy protection technology to shield digital content and would make it illegal to remove or disable the technology, whether from a secure device, or from the protected digital content played on a device.

Opposing sides in the copyright wars do have something in common—an inclination to ban what they don't like. One side, notably represented by the recording and motion picture industries, has sought bans on file-sharing technologies that undermine copyright

protection. The other side fears digital rights management (DRM) technologies, which enhance copyright through the use of encryption or hardware standards.

Critics of DRM technologies are concerned that aggressive copy protection can erode fair use rights and thereby constitute technical threats to free expression. The Electronic Frontier Foundation, for example, claims that new copyright management systems extend far beyond the strong intellectual property protections granted by law, thereby eroding checks and balances between the rights of content owners and those of their consumers.⁴³

The alternative to banning either technologies that allow copying or technologies that prevent copying is to refrain from banning anybody's technology. The justification for copyright law is to create incentives to produce artistic and scientific works. But if DRM can serve to create those same incentives, there may be less need for legal protections for copyright. In other words, a private security guard and barbed wire might be superior to a policeman and court. While the Constitution does empower Congress to protect intellectual property, the digital era is offering the opportunity to protect property rights through means other than the legal system.

But it does not follow that if DRM can facilitate the copy protection of intellectual works, government should force the technology on the marketplace. Such mandatory standards are precisely the approach taken by Sen. Hollings in his proposed Security Systems Standards and Certification Act, which would mandate government-approved copy protection features in consumer electronics and computers for purposes of protecting digital content such as music, movies, and electronic books. Specifically, the act would make it unlawful to manufacture, import, offer to the public, provide, or otherwise traffic in any interactive digital device that does not include and utilize certified security technologies.⁴⁴

Just as the answer to copyright woes brought on by mass digitization is not to ban any kind of technology, neither is the answer to

Opposing sides in the copyright wars do have something in common—an inclination to ban what they don't like.

The overriding principle should be to avoid premature regulation and, in particular, to remove any government barriers to the marketplace's ability to protect intellectual property.

force adoption of a particular kind of copy protection technology. On this narrow point at least, both the supporters of DRM, and opponents like the Electronic Freedom Foundation agree. Experimentation is important.

Some Hollywood moviemakers support the bill, hoping to avoid their own Napsterization fiasco by imposing a universal requirement for copy-protection on device manufacturers. Wayne State University law professor Jessica Litman commented, "This appears to be an attempt to expand [restrictions] to anything that has a microprocessor in it and to have everyone agree or to have the government set technological standards that will enforce copyright owners' preferences."⁴⁵

It is true that manufacturers haven't been able to develop perfect copy protection.⁴⁶ Prominent efforts by industry to control copying, such as Content Protection for Recordable Media and the Secure Digital Music Initiative, have not succeeded, even as they have caused worry among the opponents of copy protection. But the problems surrounding digitization of intellectual property relate to rules for the transition to fully digital distribution. The overriding principle should be to avoid premature regulation, like that proposed by Hollings, and, in particular, to remove any government barriers to the marketplace's ability to protect intellectual property. For example, it just so happens that the Hollings draft would offer antitrust exemptions for developing collective standards.⁴⁷ That provision in itself is a reasonable step—one to simply assure that government regulation doesn't block collective market efforts to develop technology capable of protecting intellectual property. Perhaps fear of antitrust exposure is itself to blame for some of the failure of earlier DRM approaches. In that sense, the existence of antitrust law may force the need for more than the optimal amount of intellectual property law.⁴⁸ Government should stand ready to enforce restrictive contracts; but it should not mandate such contracts.

Opponents of digital rights management often refer to the need to protect their free-

dom of speech, particularly their ability to incorporate copyrighted material in their own works or make limited copies. But the creators of original content *also* have the freedom to speak; and that implies a freedom *not* to speak, or a freedom to limit the conditions under which their own message is heard—provided, of course, that they can figure out how to do it. DRM is one way of limiting speech, or at least assuring that one has a chance of limiting it to paying customers. To the extent that government interferes with private efforts to protect property, such as compulsory licensing—or prohibitions on DRM of the sort that some would like to see—it is a violation of creators' rights.

Moreover, in another sense, since DRM technologies are another means of private or limited communication—they are, after all, based on encryption technologies—interfering with them can amount to a violation of privacy. On the other side of the coin, mandated standards for DRM such as the Hollings proposal could also harm privacy protection by locking in government-approved technology, which undercuts the principal drivers of market competition and evolution.

Thus, the importance of DRM technologies is such that the market alone does have ample incentive to at least attempt to develop versions of the technology that are workable, whatever past failures there may have been. The answer is not to mandate particular versions of such technology, or to impose an involuntary truce. The one-size-fits-all standard has no place in computer programming. A variety of approaches will be needed for copyright protection in different scenarios. The lesson from private sector failures, so far, is not that government should impose an overarching solution, but simply that there is work yet to be done. The proliferation of broadband, and the ease of file-sharing that results, will also tend to hasten that market solution.

So while digitization has created a real crisis for copyright holders, the answer is not to force others, particularly hardware makers who are their partners of sorts, to shoulder

the burden of protecting content. Legislation that turns content providers and the hardware makers they depend on into enemies is an outrageous idea on its face.

With broadband connections, content owners will sometimes find it necessary to assure that their product is secure. Yet, CDs are still offered for sale, even though selling CDs is the worst thing a record company can do if they want to prevent piracy. As Talal Shamoon, InterTrust executive vice president, puts it: "The record industry has to move away from the CD and into a protected medium with a disk with encrypted music on it. Right now, it's like putting out master recordings that can be immediately copied and traded on the Internet."⁴⁹ From that perspective, the recording industry does bear some responsibility for its own predicament and must now react.

One proposed new copy protection technique would use digital rights management, but would do so in a way that would give fair use rights high priority. BMG plans to offer CDs with two versions of every song; a copy-protected version to play on a standard stereo and a digital file (somewhat like MP3) that would play on a secure computer format like Windows Media Audio, which incorporates DRM.⁵⁰ This would preserve the ability, still important to consumers, to play a song on a stereo, while also providing the ability to play music on a computer format. It is doubtful that the drafters of the Hollings bill took these types of developments under consideration and even more doubtful that the legislation would be an improvement on them. The forthcoming torrent of bandwidth will force these kinds of innovations protect content while satisfying consumers' wants and needs. There is no need for Washington to try to preempt this inevitable process. Besides, DRM technologies that work today may be inappropriate tomorrow. A few years ago, no one had heard of MP3s, and the world's CDs were relatively safe from computer pirates.

The markets will continue to struggle to protect digitized content. While some people argue that successful DRM—regardless of its

source—goes beyond the law and disallows what fair use would allow, others claim that fair use for software is more limited. For example, Robert Holleyman of the Business Software Alliance argues: "Fair use tends to be more limited with a computer program. . . . You can't use a partial copy of the program, which eliminates some fair-use applications."⁵¹ But as the BMG example shows, the marketplace can protect digital content and address fair use concerns at the same time.

The ultimate answer to DRM lock-in is straightforward: once the protection period is over, anyone would be free to break the code and distribute. Of course, it is widely argued that the terms of copyright protection are too long; but that is a separate battle that shouldn't influence disputes over DRM.

Ironically, while some opponents of DRM technologies fear that it will lock up technologies, other opponents say the DRM technology will never work. Clearly, both groups cannot be right at the same time. Given such uncertainty, now is no time for legislation. In the final analysis, if DRM is successful, hardware makers that are too restrictive will cause customers to switch to other makers and more open-minded content providers. Hollings would outlaw such open-mindedness.

Among those open-minded hardware providers lurks a movement promoting open source hardware, or freely available hardware designs and specifications.⁵² Any DRM initiative among manufacturers will have to contend with this movement, as well as the trend among traditional manufacturers toward offering MP3 support in their electronic devices, like DVD players. Hollings's proposal would seemingly make these open source initiatives, as well as the standardization of MP3, both of which hold considerable promise, illegal. The outcry from the open source community will likely go a long way toward burying the Hollings initiative. Government should not effectively outlaw the creation of certain useful categories of software, which, in a sense, is yet another exercise of free speech. Mandatory DRM ultimately violates what one might call free engineering speech.

Government should not effectively outlaw the creation of certain useful categories of software, which, in a sense, is yet another exercise of free speech.

After a handful of incidents captured national attention, hundreds of bills were introduced that would make talking on a cellular device while driving a crime.

Issue 7: Federal Cell Phone Mandates

The Mobile Telephone Driving Safety Act (S. 972), sponsored by Sen. Jon Corzine (D-N.J.), and the Call Responsibly and Stay Healthy Act (H.R. 1837), sponsored by Rep. Gary Ackerman (D-N.Y.), would deny states a portion of federal highway funding unless they passed laws prohibiting drivers from using cellular telephones while on the road. The measure would provide an exemption for mobile phones that are used in conjunction with hands-free devices or for the use of hand-held phones during emergency situations.

It is rare for a telecom or technology policy issue to become the subject of widespread public debate. A unique exception occurred in early 2001, when a heated dispute over the use of cell phones while driving became the subject of front-page news across the nation. After a handful of incidents captured national attention, hundreds of bills were introduced in state and municipal legislatures across America that would make talking on a cellular device while driving a crime.⁵³

Although few outright bans on the use of cell phones have passed, a growing number of municipalities, as well as the state of New York,⁵⁴ have passed a ban on the use of hand-held cell phones while driving.⁵⁵ In most cases, the law allows for the use of a cell phone if the vehicle operator is using a hand-free device consisting of an earpiece and clip-on microphone. Many of these measures have exemptions for certain emergency situations. Regardless of the efficacy and sensibility of these state and local cell phone bans, no one is seriously debating whether or not state and local governments have the authority to impose new driving restrictions on their citizens. Few public policy matters are more parochial in character than traffic safety. Throughout the past century, state and local governments experimented with numerous forms of traffic safety and vehicle operating standards. Some communities opted for very restrictive standards; others allow for almost autobahn-style road behavior. Most fall somewhere in between. This diversity is a healthy by-product of America's federalist system of government.

What is unacceptable, however, are federal efforts aimed at imposing a national standard on what is so clearly a state and local responsibility. Nonetheless, S. 927 and H.R. 1837 were introduced in Congress in May of 2001 to establish such a federal cell phone mandate on the states. Sponsors of the legislation are fond of saying that the bills are not mandates since they would not technically force the states to do anything at all. The measure would simply tell the states they would lose a portion of their annual federal highway funds if they chose not to implement a cell phone ban.

But that is really a distinction without much of a difference, since this type of political blackmail has proven to be an all-too-effective way for the feds to impose backdoor mandates on state and local governments. States have come to value their highway funding so much that they are unwilling to abandon the system and self-finance their increasingly expensive infrastructure repairs and projects. The feds used this sort of political blackmail in the past when they demanded that states raise drinking age thresholds and impose 55-mph speed limits nationwide or else run the risk of sacrificing highway funds.

These efforts to impose strings or conditions on federal funding efforts stand on shaky constitutional footing and betray the founding principle of limited enumerated powers for the federal government. While courts in the post-New-Deal era have upheld similar mandates in deference to broad congressional powers over interstate commerce, recent federalism decisions have begun limiting congressional overreach.

Such decisions have suggested that the Commerce Clause does not grant Congress plenary authority over all aspects of social and economic life, especially when the activity in question has no substantive or even tangential relationship to interstate activity. Other Supreme Court decisions have made it clear that federal officials cannot commandeer state and local officials to carry out a federal program or regulation on their behalf.⁵⁶

If this logic were applied to S. 927 and

H.R. 1837, the measure might face a constitutional challenge if implemented. But it remains unclear whether the courts would be willing to strike down this measure given that so many states continue to lobby for and accept federal highway funds. Regardless, a good argument can be made that a federal cell phone ban betrays numerous federalism principles and should be considered unconstitutional if taken up by a future court.

Finally, as a practical matter, there are good reasons to be skeptical of the sensibility of cell phone bans, even at the state and local levels. Studies have shown that cell phone use is not nearly as distracting as other activities within a car, such as adjusting the stereo, talking or arguing with other vehicle occupants, eating or drinking while driving, or moving objects within the vehicle.⁵⁷ Moreover, technology is helping to solve a problem it created, since hands-free cellular devices are already on the market and are being widely used by motorists. One-button speed dialing, an option on almost all phones today, also enables drivers to place calls without having to dial a series of numbers. Better yet, voice-activated calling is around the corner. This will allow drivers to simply say call home and let the phone do the rest. And auto manufacturers are currently integrating on-board communications services into many of their new vehicles. These new technologies will enable everyone to abide by the sensible old “ten and two” rule that our high-school driving instructors taught us, allowing us to keep both hands on the wheel and our eyes on the road at all times.

In conclusion, there is a far simpler way to approach this problem from a public policy perspective: Don't try to ban technologies (cell phones, radios, CBs, etc.) or specific activities (conversations, singing, smoking, etc.) inside the cabin of an automobile. Instead, simply enforce those laws already on the books dealing with reckless or negligent driving. If a driver is weaving in and out of traffic lanes, or posing a serious threat to others on the road for any reason, he or she should be pulled over and ticketed if the infraction is serious enough.

Again, these laws are best left to state and, more specifically, local officials to determine and enforce since road safety can be adequately addressed at the community level. Uniform federal standards, such as those envisioned in S. 927 and H.R. 1837, would constitute an unjust usurpation of state and local powers and invite additional federal meddling in an area the Constitution leaves to local authorities.⁵⁸

Issue & Broadband Tax Credits

Sponsored by Sen. John Rockefeller (D-W. Va.) and Rep. Phil English (R-Pa.), the Broadband Internet Access Act (S. 88 and H.R. 267) would create a tax incentive regime to encourage communications companies to deploy broadband services more rapidly and broadly throughout America. The measure would give a 10 to 20 percent tax credit to companies that make broadband services available to rural communities and underserved areas. A network provider would be eligible for a 10 percent credit for current generation broadband services (defined as having a transmission rate of at least 1.5 megabits per second to the subscriber and at least 200 kilobits per second from the subscriber) deployed to such areas. Firms would be eligible for a 20 percent credit for next generation services (defined as at least 22 megabits downstream and at least 5 megabits upstream). The tax credit would be available from December 31, 2001, to January 1, 2006.

The Broadband Internet Access Act is unique among the bills making this list because it is promotional rather than regulatory in character. That is, the bill seeks to promote the spread of broadband access through tax incentives instead of regulating the way companies provide those services.

Because of that fact, a critic might argue that the Broadband Internet Access Act should not qualify for the ignominious honor of being placed on a list of the most destructive pieces of high-technology legislation. But, in fact, it is precisely because the bill is promotional that it does qualify. The reason it deserves a spot on this list is because

A good argument can be made that a federal cell phone ban betrays numerous federalism principles and should be considered unconstitutional.

It is unlikely that tax credits would catalyze as much deployment as policymakers hope for.

its passage would formally entrench what might be called the Digital New Deal set of programs that Washington policymakers have considered or implemented in recent years. Moreover, it would mark a dangerous precedent in terms of politicizing this dynamic industry, which so far has resisted federal intervention or assistance.⁵⁹

Legislators have already implemented a handful of small direct subsidy or loan programs in an attempt to bridge the digital divide or wire rural America. Most of these programs reside within existing Department of Agriculture, Department of Commerce, or Department of Education programs and do not cost more than a few million or a few hundred million dollars.

Although that is small change by Washington spending standards, these programs not only continue to grow larger, but funding increases and additional complementary programs are being proposed almost every month in Congress. For example, in early September, Rep. Leonard Boswell (D-Iowa) and Rep. Tom Osborne (R-Neb.) introduced H.R. 2847, the Rural America Technology Enhancement (RATE) Act, which would authorize \$3 billion in loans and credits for rural broadband deployment programs and establish an Office of Rural Technology within the Department of Agriculture to coordinate technology grants and programs.

The passage of the Broadband Internet Access Act would serve as a catalyst for such digital divide spending efforts and might be the first major step down the slippery slope of politicizing the industry. That is, if the bill passes, it would likely open the door for a litany of other similar proposals and start the unfortunate, and often irreversible, process of encouraging another industry to look to Washington for favors and special treatment. Worse yet, once enshrined into law, such subsidy programs never seem to go away, even after they have ceased to serve a purpose. Like the old adage goes: Washington programs have a beginning, a middle, and no end.

Consider the example of the Rural

Electrification Administration, which was established during the 1930s as part of the New Deal to help electrify America. Despite the fact that the electrification of America was complete by the late 1950s, the agency lived on and, in the 1990s, even changed its name to the Rural Utilities Service in a successful attempt to broaden its mission. Today the Rural Utilities Service distributes federal loans and loan guarantees not only to electric power providers, but to telecommunications companies as well. A such credit and subsidy regime is likely to mimic the Rural Utilities Service experience.

But there are many other problems with a broadband tax credit regime. The most obvious problem is that it does not address the fundamental obstacle to more rapid broadband deployment—the highly uncertain legal environment communications network providers face today. The current regulatory quagmire the American telecom sector finds itself in is confusing mish-mash of complex operating standards; overlapping jurisdictional governance; asymmetrical regulatory policies; and uneven tax treatment relative to other industries. Congress is passing the buck on these difficult issues and hoping to appease the industry, the stock market, and the public in the short term by offering broadband tax credits as a silver bullet solution to America's broadband woes. This policy placebo will not work.

It is also unlikely that tax credits would catalyze as much deployment as policymakers hope for. In the absence of fundamental regulatory reform, many providers are unlikely to significantly increase deployment efforts. While a 10 to 20 percent tax credit may help offset some of the capital costs associated with network expansion, many carriers will still be reluctant to deploy new services unless a simple and level legal playing field exists. For example, if outmoded regulatory quarantines or burdensome line-sharing requirements are applied to broadband offerings, it is unlikely carriers will want to deploy services even if tax credit incentives are available.

Finally, tax credits are unnecessary in an environment of proliferating choices. Service options in the broadband marketplace are growing rapidly, and Americans are gaining access to broadband services at a much faster rate than they were with previous technologies. In an environment of proliferating consumer choices, policymakers should exercise patience and allow the deployment process to play out naturally. The new broadband tax credit proposal will further clutter the tax code in an attempt to guide capital in politically preferred directions.

But, in conclusion, the leading argument against a tax credit regime for broadband remains the threat of politicizing this dynamic industry by allowing federal regulators to become more involved in how broadband services are provided. By inviting the feds to act as a market facilitator, the industry runs the risk of being subjected to greater bureaucratic micromanagement, since that which government subsidizes it often ends up regulating too.⁶⁰ Broadband tax credits might eventually lead to a wide array of concurrent regulatory requirements, such as broadband build-out requirements, which have already been proposed in conjunction with other broadband bills. Such requirements would establish detailed guidelines or timetables for companies to provide specific types of service to particular communities. It is not hard to imagine that such tinkering with the daily affairs of industry might become more commonplace if Washington starts subsidizing broadband deployment.

That explains why T. J. Rodgers, president and CEO of Cypress Semiconductor, has cautioned the high-tech industry about normalizing relations with Washington. As Rodgers says, "The political scene in Washington is antithetical to the core values that drive our success in the international marketplace and risks converting entrepreneurs into statist businessmen."⁶¹

Issue 9: Increased Antitrust Oversight for the Telecom Sector

The Broadband Competition and Incen-

tives Act (H.R. 1697), sponsored by Reps. Chris Cannon (R-Utah) and John Conyers Jr. (D-Mich.), would forbid the Baby Bells from serving the long distance market as long as they serve at least 85 percent of the business or residential market. The American Broadband Competition Act (H.R. 1698), also sponsored by Reps. Cannon and Conyers, would go much further by adding two new sections to the Clayton Act, which would significantly step up antitrust enforcement against the Bells if they failed to satisfy the regulatory requirements of the Telecom Act pertaining to the sharing of their networks and facilities with competitors.

The continued debate over the controversial Internet Freedom and Broadband Deployment Act (H.R. 1542) was even more contentious in 2001 than in previous years. The bill, which is sponsored by House Commerce Committee Chairman Billy Tauzin (R-La.) and ranking member John D. Dingell (D-Mich.), proposed small but important steps to liberalize the broadband marketplace by allowing the incumbent local telephone exchange carriers (or Baby Bells) to offer Internet and data services across long-distance boundaries. The Bells are currently not allowed to serve the long-distance voice marketplace without the approval of state and federal regulators. The amended version of the bill would also somewhat limit the line-sharing requirements placed on the Bells by the Telecommunications Act of 1996, but it would still require them to share certain portions of their networks with competitors.

Opponents waged an expensive media advertising and Hill lobbying war to advance or hinder the adoption of the Tauzin-Dingell bill. The remarkably acrimonious debate also spurred a host of alternative proposals to encourage competition in telecommunications markets and spur broadband deployment nationwide. Some of the proposals were promotional in character, such as the proposal to offer broadband tax credits discussed above (See S. 88 and H.R. 267, The Broadband Internet Access Act). Other initiatives were more re-regulatory in character, such as Sen.

Tax credits are unnecessary in an environment of proliferating choices.

**Markets—not
mandates or sub-
sidies—are the
best way to spread
broadband.**

Hollings's proposal to impose a second divestiture on the local telecommunications market (See entry 1 in S. 1364, The Telecom Fair Competition Enforcement Act).

Similar proposals to allow increased antitrust oversight by the Department of Justice were entertained, but ultimately rejected, in the months preceding enactment of the Telecommunications Act of 1996. Nonetheless, the Conyers-Cannon bills would reopen the Telecom Act and reverse that policy choice by virtually mandating that the Department of Justice and the antitrust courts become more active in industry policymaking. Ironically, the primary reason Congress undertook efforts to pass what was eventually to become the Telecom Act of 1996 was to remove authority over this sector from the courts and transfer it to Congress. The Conyers-Cannon bills would reverse this trend and invite unwarranted government meddling in telecom markets and a wave of time-consuming antitrust litigation.

What these bills are actually trying to do is handpick winners and losers in the telecom marketplace by handicapping the incumbent Bell Operating Companies or offering their competitors assistance in their efforts to compete against the Bells. In fact, one of the Conyers-Cannon bills, H.R. 1697, would also authorize the attorney general and the Department of Justice to make \$3 billion in direct loans or loan guarantees to broadband service providers to help encourage competition with incumbent local carriers. This proposal is unprecedented in that it would put the Department of Justice in the position of becoming a market facilitator, a role usually reserved for the Department of Agriculture or the Department of Commerce. Moreover, such subsidy efforts threaten to create a New Deal entitlement mentality for the Internet. Markets—not mandates or subsidies—are the best way to spread broadband. Finally, the combined effect of the introduction of these bills alongside Sen. Hollings's divestiture bill has been probable death of telecom deregulation for another session of Congress.⁶²

Issue 10: The Rise of the Privacy Police

Sponsored by Rep. Anna Eshoo (D-Calif.), the Consumer Internet Privacy Enhancement Act (H.R. 237) seeks to protect the personal information that consumers reveal on websites, by requiring sites to reveal their collection policies and by allowing users to limit use and disclosure of their information. Guarantees of security of personal information would also be required.

There's an old riddle that captures the paradox of the ongoing Internet privacy debate: Q. What belongs to you, but others use it more than you do? A. Your name.

People view personal information as theirs, yet they realize others must know that information to communicate with them. With the Internet, the problem is figuring out who should know what and when.

Much of the business community, including Hewlett-Packard, Intel, and eBay, endorses legislation to require prominent notice of a website's privacy policy and an opportunity to opt-out of information collection. President Bush embraced such notice and consent policies during his presidential campaign.

Of course that support for federal legislation is typically contingent on preempting state regulation to prevent a patchwork of privacy laws. Cliff Stearns (R-Fla.), chairman of the Commerce, Trade and Consumer Protection Subcommittee, is working on a privacy bill that would preempt the states from passing their own legislation.⁶³ But any federal bill preempting states from setting their own policies will raise the ire of state legislatures and be challenged on federalism grounds. Federal Trade Commission Chairman Tim Muris noted that the patchwork argument may be the best case for a federal law, but that such a step is still premature because inconsistent state laws have not yet emerged, and because privacy abuses are lessened by the fact that some national companies, like Visa, require sites with which it does business to adopt privacy policies.⁶⁴ Over-regulation at the state level may also be tempered by the fact that businesses can relocate to less restrictive states.

Congress exploits the fear of an Internet eye in the sky to gain new regulatory powers.

In any event, privacy legislation at any level of government gets complex very quickly. One of the most fundamental questions is what the standard for use of consumer information should be. Some legislators favor the opt-out standard that many businesses already endorse—by which consumers are allowed to say no to use of their information, but companies may use it if there is no explicit objection. Others favor a much more restrictive opt-in standard—under which no information may be used at all until a consumer says yes. One of the more most prominent approaches so far introduced in the 107th Congress is H.R. 237, the Consumer Internet Privacy Enhancement Act, which is similar to an effort by Sen. John McCain (R-Ariz.) in the 106th Congress. The Eshoo bill and the proposed Stearns measure endorse the opt-out approach, while an even more onerous opt-in bill is expected from Sen. Hollings.

But special privacy policies directed at the Internet but not the off-line world (like frequent flyer clubs, supermarket discount card programs, or TiVo's monitoring of the television viewing habits of those using its digital recorder) are discriminatory and unfair.

Congress exploits the fear of an Internet eye in the sky to gain new regulatory powers, and that hurts consumers and e-commerce. Businesses don't seek information because they want to harm people. Businesses want to sell things, which may sometimes be irritating, but is hardly threatening. Many people are amazed and delighted that Amazon.com can anticipate the next book they may want to buy. As author Michael Lewis put it: "People are willing to feign outrage on command, until they see the benefits of relinquishing their privacy. . . . People are not going to worry much about privacy—unless some really horrible things are done, which I don't think corporations are stupid enough to do."⁶⁵ Another consideration is that small businesspeople, who may seek to promote their own offerings online, will be hurt by onerous regulation more than will larger companies that have already assembled databases or can afford to purchase them.

The notice and choice allegedly sought in privacy legislation already exist. Amazon's policy is explicit, for example, and users are informed about any changes to that policy. Indeed, most prominent websites do feature privacy policies—and those that don't should be avoided. Users can set their web browser to reject information gathering (by turning off cookies). Barring that, free software tools that warn when information is being collected can further empower consumers. The market provides tools, such as SafeWeb, for anonymous surfing.

The concept of privacy encompasses varying types of relationships between consumers and businesses. No single level of privacy or approach to privacy safeguards is appropriate for everyone. Moreover, individuals may wish to present different faces in the online world. Some will want to be secretive, while others post all their private information on personal websites.

In the evolving, jumbled world of e-commerce and individual preferences, the government's role is not to dictate the terms of privacy contracts ahead of time, but to *enforce* privacy contracts that companies have made with consumers. That's the approach the government took when it halted Toysmart's sale of consumer data in violation of its stated privacy policy. Where sites post privacy policies, the data consumers make available will have been granted conditionally, and companies must be held to their promises. As lawyer-author Jonathan Bick told GigaLaw, "Bad privacy agreements are deceptive trade practices."⁶⁶

The good side of the Internet's information customization is the improved relevance of offers and advertisements—fewer pitches are "junk," in the sense that they can increasingly be tailored to individual interests. Like the gas station sign on a long stretch of road in Nevada, advertisements suddenly become welcome when they offer something one needs.

And information customization benefits individuals and society as a whole by lowering the costs of services like credit and insurance and boosting their availability. The family that

Restrictions on information collection undercut the principle of free and open speech.

had to settle for a secured credit card may benefit from probability tables that find them a good credit risk because of job history or other facts. Information sharing expands options and gives people second chances. A reputation that could exclude an individual from service in one setting may be irrelevant in another, or when viewed in context with other Internet-gleaned facts. Information also expands Internet access itself. While some users pay monthly access fees, others, who don't mind supplying information and suffering through a few banner ads, can obtain discounted Internet access or free e-mail services.

As businesses respond to consumer preferences, more stringent privacy protections will emerge. Some companies are even developing techniques for anonymous shopping in response to privacy concerns. Inevitably, sites will develop policies knowing that ever-more-efficient browser policing software will increasingly report to surfers on the level of security. Mistakes will be made. But restrictive policies can hinder evolving privacy technologies before they mature, weakening consumers against malicious spies and hackers who take advantage of a false sense of security.

Moreover, the same governments that are allegedly eager to protect privacy, can be the leading offenders. Governments have mandated the creation and distribution of the most sensitive information in the first place, such as driver's license and Social Security numbers. Little can rival the Internal Revenue Service and a proposed Internet tax collection scheme in terms of invasion of privacy. And the recently passed anti-terrorism legislation has raised a host of issues with respect to surveillance of individuals. While one can certainly oppose government encroachments and still support Internet privacy legislation, one must admit that the government does not have a track record that inspires confidence as a protector of personal information.

The distinction between information disclosure forced by governments on the one hand and ordinary web commerce on the other is critical. Any law limiting information

collection might best target government first. In the private sector, there are at least profit incentives to back up assurances of privacy.

In the final analysis, restrictions on information collection—particularly the opt-in, gag-commerce approach that Sen. Hollings favors—undercut the principle of free and open speech. As University of California, Los Angeles, law professor Eugene Volokh has noted, "We know things about any individual we run across, and we are free to write down what we know or tell others."⁶⁷ There are problems with the notion of a right to stop people from talking about you, he says, just as we talk about others—and about the companies we deal with.

Policymakers should opt out of privacy legislation and avoid the damage it would cause to e-commerce, consumers, and the First Amendment. The best approach is to target fraud, identity theft, and enforce companies' own privacy policies, which is largely the approach favored by Federal Trade Commission chairman Tim Muris.⁶⁸

Issue 11: Internet Gambling: Regulating Personal Behavior

Your disposable income belongs to you. You're free to spend it, invest it, waste it, burn it, or tithe it, and none of that is the business of politicians. But if some legislators have their way, you won't be able to use your money to gamble on the Internet.

Two leading bills seek to halt such gambling.⁶⁹ H.R. 556, the Unlawful Internet Gambling Funding Prohibition Act, introduced by Rep. James Leach (R-Iowa), seek to ban the acceptance of any financial instruments (such as credit cards, checks, or electronic transfers) to process gambling transactions—duties that would extend even to blocking transactions with offshore casinos. Not surprisingly, that approach is opposed by credit card companies that don't want to be burdened with the responsibility of assuring that companies for which they offer card services are not involved in gambling operations. The Combatting Illegal Gambling Reform and Modernization Act (H.R. 3215), introduced by

Robert Goodlatte (R-Va.), seeks to target illegal online betting itself rather than the means.⁷⁰ However H.R. 3215 would allow states to legalize Internet gambling if they chose—as if the matter were properly up to the federal government and citizens of the various states needed permission.

Of course, in this privacy-sensitive era, the question arises: assuming you *were* gambling on the Internet, how would the government ever know about it? For the government to know about such personal, consensual behavior would require spying—or appointing spies. And that's what anti-gambling legislation would do. Either the banks would fill the role of snooper, or internet service providers would be drafted into duty. To monitor gambling transactions would require sifting through all financial transactions, a notion most find repugnant. An earlier debate over “know-your-customer” rules from the Federal Deposit Insurance Corporation resulted in outrage and rejection by Congress when the privacy invasion by the government became apparent.⁷¹ As one commentator put it, “In order to know whether someone is gambling online, law enforcement would have to have access to that person's computer.”⁷² But even if one were gambling, government has no right in principle to know about it, or to force disclosure of that information. For these reasons, lawmakers need to be questioned intently on privacy implications of gambling legislation.

In this post-9/11 era, it's understandable that politicians would be concerned about shady financial goings-on on the Internet. Rep. Leach sees gambling as a tool for money laundering. But passing all-encompassing, all-monitoring legislation, rather than targeting a particular threat, is the wrong approach. Terrorists should be forced to change their behavior; ordinary Americans should not. Like the quick burst of interest in reviving anti-encryption policies following the terrorist attacks,⁷³ Congress is barking up the wrong tree, diverting attention from missed prior clues. To bring federal surveillance to consumer financial transactions before consumers have even embraced

Internet banking as such, has serious implications for people's willingness to welcome online finance. The ease with which the government proposes surveillance of innocent people leads one to wonder, What does government *not* have the power to do?

Another rationale for gambling restrictions is to target not the gamblers but the shady operators who run phony operations. But consumers have the incentive to look for endorsements and seals of approval of the gambling operations with which they transact, and to avoid fly-by-night operators. Of course there are always risks. Even upstanding games of chance like those offered at McDonalds restaurants can have problems with manipulation by insiders.⁷⁴ Most people realize that gambling is a pastime in which the house usually wins. Indeed, gambling is a problem for some who have trouble controlling themselves. But some enjoy the challenge, and others just think it's fun and are able to contain their addictive impulses.

What constitutes gambling is often in the eye of the beholder. Investing itself can be a gamble, in the sense that the opportunity to win is predominantly subject to chance—as the Goodlatte bill refers to gambling. Yet his bill exempts any over-the-counter derivative instrument, though these clearly are not for the faint of heart. Only some gambling is bad, apparently. Fantasy sports gets a limited exemption. As Brad Jansen and Lisa Dean of the Free Congress Foundation put it, gambling legislation essentially would prohibit all Internet gambling other than for politically favored activities such as jai-alai and horse racing.⁷⁵

One gets the impression that the real motive behind anti-gambling legislation isn't to protect against crime or to protect vulnerable individuals against unscrupulous people but to legislate morality. Of course, it's not the job of politicians to hector constituents about morality; if anything, the lecturing should go the other way.

Rep. Barney Frank rightly opposed the idea of government regulation of consensual behavior: “It is all motivated by the fact that a good number of people think gambling is

The real motive behind anti-gambling legislation isn't to protect against crime or to protect vulnerable individuals against unscrupulous people but to legislate morality.

Regulation of any kind, of content whether pornography, gambling or other kinds of speech, is a bad idea.

something people shouldn't do. . . . I don't think we should set ourselves up as the national household budget manager."⁷⁶

Government shouldn't turn vices into crimes—even granting the notion that gambling is a vice, which is itself open to question. Perhaps pork-barrel spending is a more serious vice, one to which Congress really should pay more attention to. How significant are gambling losses compared to pork-barrel spending, to which citizens are *forced* to contribute?⁷⁷

Rep. Ron Paul (R-Texas) summed up the matter well in 2000: "The overriding freedom issue [with respect to gambling] is whether or not government should be involved in trying to improve personal behavior by an authoritarian approach by the use of law. This really falls into the category of legislating morality. I don't happen to like gambling, and I think it is rather dumb, to tell you the truth, but in a free society, people should have the right to do dumb things."

Gambling limitations also amount to content regulation, something the U.S. Courts have opposed with respect to a French Court demand that Yahoo block French shoppers from Nazi-related material on its websites.⁷⁸ Regulation of any kind of content, whether pornography, gambling, or other kinds of speech, is a bad idea. Once we travel down that road, there's no limit to government's ability to ban voluntary speech and interaction and to substitute its moral vision for those of individuals.⁷⁹

Issue 12: New Wireless Cell Phone Regulatory Regime

The Cell Phone Service Disclosure Act (H.R. 1531), sponsored by Rep. Anthony Weiner (D-N.Y.), would require that the Federal Communications Commission (1) establish and administer a system, including a toll-free telephone number, for registering complaints regarding the quality or performance of commercial mobile telephone services, (2) force each cellular service provider to include in each subscriber's bill a statement informing the subscriber of this new system, and (3) submit a report to Congress

every six months summarizing cellular service complaints and affected areas.

The rapid rise and diffusion of cellular telecommunications service throughout America ranks as one of the great technology success stories of the past few decades. Twenty years ago, suitcase-sized cellular systems were just starting to be utilized by those few businesses that could afford them. Ten to fifteen years ago, a handful of wealthier citizens had access to heavy, brick-sized cell phones for personal use. But by the end of 2001, an amazing 123 million Americans counted themselves as cell phone subscribers. In the past decade, the device has gone from being considered a luxury item to a commonplace commodity, as even children now carry them because of their small size and ease of use. In a telecommunications industry often characterized by limited competition and service options, the cellular revolution has been a breath of fresh air for consumers.

But, alas, this isn't good enough for some policymakers and regulators. Some lawmakers claim that the industry is doing a poor job of serving consumers or even defrauding them by hiding poor service records. Hence, H.R. 1531, The Cell Phone Service Disclosure Act, proposes that the FCC begin looking into cellular industry service quality and performance standards.

True, the cellular industry isn't perfect, but few industries are. There is certainly room for improvement in terms of lowering the number of dropped calls, which are typically created by cellular dead zones.⁸⁰ Ironically, many of these service glitches are brought on by government regulations, especially state and local zoning rules, that make it difficult for network providers to install the additional cell towers necessary to improve signal strength and reception.⁸¹

The more fundamental problem responsible for the industry's growing pains, however, is the general shortage of spectrum available to cellular providers in many geographic areas. Again, this is a problem that exists largely because government regulations have created artificial spectrum scarcity. For example, for years the FCC has capped the overall

amount of spectrum any one company could own and use in a given geographic marketplace at 45 megahertz (MHz). Realizing the detrimental impact this was having on efforts by the industry to offer superior service, the FCC announced in early November 2001 that it would temporarily raise the cap to 55 MHz in all markets and then eliminate it altogether by January of 2003.⁸² But in the short-term, many consumers will still suffer from poor service coverage or quality due to the impact of this artificial cap on spectrum capacity.

More important, there remains a heated debate regarding how much spectrum the federal government should make available overall for cellular services relative to competing uses, such as military and law enforcement services, educational broadcasting, and traditional over-the-air television broadcasting.⁸³ These users compete with cellular companies for spectrum, and because of their formidable lobbying muscle in Washington, they often prevail when a spectrum tug-of-war develops.

In the findings section of H.R. 1531, the bill laments that the fact that there is currently no measure of acceptable wireless telephone service, and that no single federal, state, or local agency is required by law to compile complaints regarding wireless telephone service. This is true, but instead of seeing this as a cause for great concern, Americans should be thankful that cellular phones *are not* subjected to a comprehensive set of overlapping regulatory standards similar to those imposed on its wireline counterparts.

After all, why should there be a single measure of acceptable service in this sector? Does such a regulatory standard govern the market for soda pop or semiconductors? Potato chips or personal computers? Blue jeans or book publishers? In other words, Americans do not need—nor would they tolerate—federal bureaucrats defining acceptable service quality standards in other business sectors that they rely on, and the cellular industry should be treated no differently.

But more profoundly, a very serious danger exists that this bill will open up the door

for a full-blown system of rate and service quality regulation for the wireless sector similar to that which regulators have imposed on the wireline sector for decades.

The wireline portion of the telephone industry faces a staggering array of federal, state, and local operating standards which govern service quality and pricing policies. While the wireline sector has been granted greater regulatory leeway regarding its service offerings or pricing plans, numerous burdensome rules still exist that govern price and service quality issues. That begs the question: What good have these rules and regulations really done? The wireless sector has faced far fewer regulatory mandates, and by most statistical and anecdotal measures, the industry vastly outpaces its wireline counterparts. Consider the following statistics culled from the Cellular Telecommunications and Internet Association's *Semi-Annual Wireless Industry Survey*:⁸⁴

- *The number of networks and competitors has flourished.* Almost all Americans have a choice of at least three wireless providers in their communities, with most having more than five to choose from. Some areas possess as many as eight different service providers.
- *Investment has risen steadily.* Cumulative capital investment rose from \$588 million in 1985 to almost \$100 billion by 2001.
- *Call quality has improved constantly.* The conversion from analog to digital signal transmission has offered consumers superior reception and helped lower signal loss.
- *Service options have multiplied.* Today's cell phones have a long list of integrated features including voice mail, extensive personal phone book capabilities, one-touch dialing, and Internet browsing and e-mail services.
- *Prices have fallen fairly steadily.* Average local monthly bills fell from an estimated \$95 per month in 1988 to roughly \$45 in 2001.

After all, why should there be a single measure of acceptable service in the wireless sector?

The high-tech sector is under assault by lawmakers and regulators who are hungry to impose their own grand design on this dynamic marketplace.

In light of this stunning success story, a federal price or service quality regulatory regime for cellular service is unnecessary and would turn this exciting industry into a more sluggish sector, concerned more with responding to the whims of regulators than to the wishes of consumers. H.R. 1531, The Cell Phone Service Disclosure Act, is a dangerous first step in that direction.

Conclusion

The message to be drawn from this legislative review is that the high-tech sector is increasingly coming under assault by lawmakers and regulators who appear to be hungry to impose their own grand design on the future of this dynamic marketplace. For whatever reason—impatience with the pace of technology diffusion; anger with the practices of an emerging business sector; annoyance with the way cyber-technologies and communications gadgets are being used; or just a stubborn refusal to believe that markets will find a way to work out problems better than bureaucrats might—it appears Washington is ready to embark on an ambitious regulatory journey through cyberspace. Sadly, the lessons provided by a century's worth of regulatory activism in the telecommunications sector have not apparently provided any warning to policymakers of the perils that await them.

Note

1. "If the Stock Market Does Climb a Wall of Worry, We Could Be in for Trouble," *The Red Herring Portfolio*, December 1998, www.stockmaster.com/mag/issue67/inv-portfolio.html.
2. See National Venture Capital Association, "Venture Capital Investments Made from 1990–2000," *Latest Industry Statistics*, www.nvca.org/ffax.html.
3. *National Journal's Technology Daily*, nationaljournal.com/pubs/techdaily/briefroom/billstatus/index.htm.
4. *Technology Legislation Survey*, Empower America, Washington, July 2001.

5. For an excellent history of the AT&T breakup, see Steve Coll, *The Deal of the Century: The Breakup of AT&T* (New York: Touchstone, 1986).

6. The Telecommunications Act of 1996, Pub.L. No. 106-252, 114 Stat. 626 (2000).

7. For a comprehensive summary of the law's provision, see Peter W. Huber, Michael K. Kellogg, and John Thorne, *The Telecommunications Act of 1996* (Boston: Little, Brown, 1996); and *The Telecommunications Act of 1996: Law & Legislative History*, ed. Robert E. Emeritz, Jeffrey Tobias, Kathryn S. Berthot, Kathleen C. Dolan, and Michael M. Eisenstadt (Bethesda, Md.: Pike & Fischer, 1996).

8. For a discussion of the problems associated with the Telecom Act's sharing provisions, see Adam D. Thierer, "A 10-Point Agenda for Comprehensive Telecom Reform," Cato Institute Briefing Paper no. 63, May 8, 2001, www.cato.org/pubs/briefs/bp-063es.html; Adam D. Thierer, "The Promethean Illusion Continues" in *Reflections on the Fifth Anniversary of the Telecommunications Act*, February 2001, www.newmillenniumresearch.org/ezone0102/ezone0102.html; Thomas W. Hazlett, "Economic and Political Consequences of the 1996 Telecommunications Act," *Regulation* 23, no. 3 (2000): 36–45, www.cato.org/pubs/regulation/regv23n3/hazlett.pdf; and *Cato Handbook for Congress, 107th Congress*, pp. 449–57, www.cato.org/pubs/handbook/hb107/hb107-42.pdf.

9. Ironically, the most vocal supporter of another divestiture of the Bell telephone system is AT&T, the company that originally controlled the entire Bell system network. See Yochi J. Dreazen, "AT&T Ratchets Up Efforts in Washington Pushing Bell Breakup Plan," *Wall Street Journal*, August 28, 2001, p. A16.

10. The United Kingdom's experiment with vertical disintegration of British Rail is instructive in this regard as investment, innovation, and safety suffered in the wake of structural separation. See Jerry A. Hausman, *Will New Regulation Derail the Railroads?* (Washington: Competitive Enterprise Institute, October 2001), pp. 10–12.

11. Ron Cowles and Alex Winogradoff, "Structural Separation: The Final Solution for Advancing Local Competition?" *Market Analysis*, Gartner Dataquest, April 10, 2001, pp. 4–5.

12. *Ibid.*

13. For further reading, see Adam Thierer and Wayne Crews, "Structural Separation of the Bells—An Idea Whose Time Has Passed," Cato Institute *TechKnowledge* no. 17, August 20, 2001, www.cato.org/pubs/techknowledge.

cato.org/tech/tk/010820-tk.html; and Adam Thierer, "Two Bizarre and Backward Ideas for Broadband Deployment," Cato Institute *TechKnowledge* no. 9, May 23, 2001, www.cato.org/tech/tk/010523-tk.html.

14. For a general discussion, see Alexandra Rockey Fleming, "Battle over TV: Parents Urged to Boost Their Media Literacy, Help Young Make Choices," *Washington Times*, August 12, 2001, p. D1.

15. David E. Rosenbaum, "Protecting Children, Tempting Pandora," *New York Times*, June 27, 2001, p. B1.

16. Ironically, although censorship measures are usually most vociferously supported by conservatives such as William Bennett, S. 792 was the brain-child of several Senate Democrats. See Yochi J. Dreazen, "Democrats May Be Goring Their Own Ox as Lieberman, Hollings Target Hollywood," *Wall Street Journal*, June 20, 2001, p. A20.

17. See Jonathan W. Emord, *Freedom, Technology, and the First Amendment* (San Francisco, Calif.: Pacific Research Institute, 1991); Fred H. Cate, "The First Amendment and the National Information Infrastructure," *Wake Forest Law Review* 30, no. 1 (Spring 1995): 1-50; Lawrence Gasman, *Telecompetition: The Free Market Road to the Information Highway* (Washington: Cato Institute, 1994), pp. 141-51; Michael Schrage, "In the Emerging Multimedia Age, the 1st Amendment Must Come First," *Washington Post*, September 30, 1994, p. B3; and Thomas G. Krattenmaker and Lucas A. Powe, *Regulating Broadcast Programming* (Washington: AEI Press, 1994).

18. For further reading, see Roger Pilon, vice president for legal affairs, Cato Institute, "Rating Entertainment Ratings: How Well Are They Working for Parents, and What Can Be Done to Improve Them?" Testimony Before the Senate Committee on Government Affairs, 107th Cong., 1st sess., July 25, 2001, www.cato.org/testimony/ct-rp072501.html.

19. Brian Krebs, "Senate Passes Two-Year Internet Tax Ban," *Newsbytes*, November 15, 2001, www.newsbytes.com/news/01/172220.html.

20. Krebs, "Bush Signs Two-Year Internet Tax Ban Extension," *Newsbytes*, November 28, 2001, www.newsbytes.com/news/01/172500.html.

21. For a comprehensive discussion of Supreme Court decisions and federal laws governing Nexus requirements, see Karl Frieden, "Nexus, Remote Sellers, and the Internet," in *Cybertaxation: The Taxation of E-Commerce* (Chicago, Ill.: Commerce Clearing House Incorporated, 2000), pp. 263-357.

22. For an excellent summary of the problems faced by interstate vendors because of the complexity of the current sales tax system, see Robert J. Cline and Thomas S. Neubig, *Masters of Complexity and Bearers of Great Burden: The Sales Tax System and Compliance Costs for Multistate Retailers*, Ernst & Young, September 8, 1999.

23. Stephen J. Entin, president and executive director, Institute for Research on the Economics of Taxation, "Fundamental Tax Reform: The Inflow Outflow Tax—A Savings-Deferred Neutral Tax System," Testimony before the House Committee on Ways and Means, 106th Cong., 2nd sess., April 13, 2000, <http://waysandmeans.house.gov/fullcomm/106cong/4-13-004-13enti.html>.

24. Michael S. Greve, "E-Taxes: Between Cartel and Competition," *Federalism Outlook* no. 8, September 2001; Andrew Wagner and Wade Anderson, "Origin-Based Taxation of Internet Commerce," *State Tax Notes*, July 19, 1999, pp. 187-92; Terry Ryan and Eric Miethke, "The Seller-State Option: Solving the Electronic Commerce Dilemma," *State Tax Notes*, October 5, 1998, pp. 881-92; and Jessica Melugin, "Internet Sales Taxation: Beyond the Moratorium," Competitive Enterprise Institute Policy Brief, March 28, 2000.

25. The Mobile Telecommunications Sourcing Act (P.L. 106-252) was passed into law in the summer of 2000. It established a national standard for taxing wireless cellular phone calls by requiring that taxes be levied only at the user's place of primary use, which would typically be their home or business. For more information, see Michael S. Greve, "Opportunity Rings: New Cellphone Law Shows Way on Internet Taxation," Competitive Enterprise Institute *On Point* no. 72, September 14, 2000.

26. For further reading, see Aaron Lukas, "Tax Bytes: A Primer on the Taxation of Electronic Commerce," Cato Institute Trade Policy Analysis no. 9, December 17, 1999, freetrade.org/pubs/pas/tpa-009es.html; Aaron Lukas and Adam Thierer, "Avoiding a Net Tax Cartel Catastrophe," Cato Institute *TechKnowledge* no. 7, May 3, 2001, www.cato.org/tech/tk/010503-tk.html; Aaron Lukas, "Closing the Net Tax Debate (Part 1): The Myth of the Level Playing Field," Cato Institute *TechKnowledge* no. 22, October 5, 2001, www.cato.org/tech/tk/011005a-tk.html; Adam Thierer, "Closing the Net Tax Debate (Part 2): Identifying the Real Sales Tax Drain," Cato Institute *TechKnowledge* no. 23, October 5, 2001, www.cato.org/tech/tk/011005b-tk.html; and Aaron Lukas, "Closing the Net Tax Debate (Part 3): Taxing Digital Downloads," Cato Institute *TechKnowledge* no. 25, October 17, 2001, www.cato.org/tech/tk/011017-tk.html.

27. Noted in Maureen Sirhal, "Experts Struggle to Gauge Impact of 'Spam,'" *National Journal's Technology Daily*, May 7, 2001, p. 4.
28. Adriel Bettelheim, "House Judiciary Committee Narrows Scope of Bill Aimed at Regulating 'Spam,'" *CQ Weekly*, May 26, 2001, p. 1262.
29. Noted in Declan McCullagh, "Consuming Spam Mail," *Contributors' Forum*, The Library of Economics and Liberty, February 12, 2001, www.econlib.org/library/columns/McCullagh_spam.html.
30. Such opt-in marketing practices are noted in, for example, Leslie Walker, "Buried Under a Mountain of Spam," *Washington Post*, May 3, 2001, p. E8.
31. Maureen Sirhal, "Lawmakers Question Need for Regulation of Spam," *National Journal's Technology Daily*, May 10, 2001, www.nationaljournal.com/pubs/techdaily/pmeditation/tp010510.htm.
32. An example is available at www.mailcircuit.com.
33. For example see Michelle Finley, "Other Ways to Fry Spam," *Wired News*, April 24, 2000, www.wired.com/news/print/0,1294,35776,00.html.
34. See Jonathan D. Wallace, "Nameless in Cyberspace: Anonymity on the Internet," Cato Institute Briefing Paper no. 54, December 8, 1999, www.cato.org/pubs/briefs/bp-054es.html.
35. Clyde Wayne Crews Jr., "Why Canning 'Spam' Is a Bad Idea," Cato Institute Policy Analysis no. 408, July 26, 2001, www.cato.org/pubs/pas/pa-408es.html.
36. Lawrence Lessig, "Just Compensation," *Industry Standard*, April 9, 2001, www.thestandard.com/article/0,1902,23401,00.html.
37. Robert P. Merges, "Contracting Into Liability Rules: Intellectual Property Rights and Collective Rights Organizations," *California Law Review* 84 (1996), www.law.berkeley.edu/institutes/bclt/pubs/merges/contract.htm.
38. Dominic P. Ciminello, "New MP3 Legislation Proposed," *Internet Law Journal*, October 11, 2000, www.tilj.com/content/ipheadline10110001.htm.
39. Frank G. Hausmann, chairman and CEO, CenterSpan Communications Corporation, Testimony before the Senate Committee on the Judiciary, 107th Cong., 1st sess., April 3, 2001.
40. "Source: MusicNet, Pressplay Probe Began Months Ago," *Industry Standard*, August 7, 2001, www.thestandard.com/article/0,1902,28532,00.html.
41. For further reading, see Clyde Wayne Crews, "Musical Mandates: Must the Pop Music Industry Submit to Compulsory Licensing?" Cato Institute *TechKnowledge* no. 16, August 15, 2001, www.cato.org/tech/tk/010815-tk.html; and Clyde Wayne Crews and Adam Thierer, "When Rights Collide: Principles to Guide the Intellectual Property Debate," Cato Institute *TechKnowledge* no. 10, June 4, 2001, www.cato.org/tech/tk/010604-tk.html.
42. This staff working draft is referenced and linked by the Electronic Frontier Foundation in *Action Alert*, "Defeat the 'Security Systems Standards and Certification Act,'" September 21, 2001, www.eff.org/alerts/20010921_eff_sssa_alert.html.
43. Electronic Frontier Foundation web site, www.eff.org/buildin.html.
44. Hollings draft, pp. 1-2.
45. See Declan McCullagh, "New Copyright Bill Heading to D.C.," *Wired News*, September 7, 2001, www.wired.com/news/politics/0,1283,46655,00.html.
46. See, for example, John Borland, "Hardware Safe From Copy Protection—for Now," *ZDNet News*, April 2, 2001, www.zdnet.com/zdnn/stories/news/0,4586,5080528,00.html.
47. Hollings draft, p. 5.
48. M. Burtis, "Intellectual Property and Antitrust Limitations on Contract," in *Dynamic Competition and Public Policy: Technology, Innovation and Antitrust Issues*, ed. J. Ellig (Cambridge University Press, 2001), pp. 229-63.
49. Brad King, "Loopy Ideas Secure Music Rights," *Wired News*, May 18, 2001, www.wired.com/news/mp3/0,1285,43894,00.html.
50. Reuters, "Copy-Proof CDs Coming?" *CNN.com*, August 8, 2001, www.infowar.com/iwftp/icn/09Aug2001_Copy-Proof_CDs_Coming.shtml.
51. Robert Lemos, "Consumer Rights on the Block?" *ZDNet News*, January 17, 2001, www.zdnet.com/zdnn/stories/news/0,4586,2675033,00.html.
52. See, for example, John G. Spooner, "Open Source Moves into Free Hardware," *ZDNet*, March 28, 2001, news.zdnet.co.uk/story/0,,s2085331,00.html.
53. Peg Tyre and Julie Scelfo, "A Car, a Call and a Terrible Crash," *Newsweek*, May 14, 2001; E. J. Dionne Jr., "Cellular Thinking," *Washington Post*, June 26, 2001, p. A17.
54. Dennis K. Berman, "New York's Law on

- Cellphones Starts Tomorrow," *Wall Street Journal*, October 31, 2001, p. B1.
55. For a survey of these measures, see Matt Sundeen, "Driving While Calling—What's the Legal Limit?" *State Legislatures*, October/November 2001, pp. 24–26.
56. For a survey of these modern federalism decisions, see Adam D. Thierer, *The Delicate Balance: Federalism, Interstate Commerce, and Economic Freedom in the Technological Age* (Washington: The Heritage Foundation, 1998), pp. 25–46.
57. Jane C. Stutts, manager of epidemiological studies, University of North Carolina, Testimony before the Subcommittee on Highways and Transit of the House Committee on Transportation and Infrastructure, 107th Cong., 1st sess., May 9, 2001.
58. Adam Thierer, "Beware of the Cellular Keystone Cops," Cato Institute *TechKnowledge* no. 8, May 9, 2001, www.cato.org/tech/tk/010509-tk.html.
59. A wide variety of high-tech companies, lead primarily by fiber optic manufacturers, have been vociferous supporters of this measure. See Scott Thurm and Glenn R. Simpson, "Tech Industry Seeks Salvation in High-Speed Internet Connections," *Wall Street Journal*, June 25, 2001, p. B1; and John D. McKinnon, "Companies Push for Tax Breaks under Guise of Easing Digital Divide," *Wall Street Journal*, October 23, 2000, p. B1.
60. Brian Mitchell, "Tax Breaks Give Gov't Bigger Role in Picking Net's Winners, Losers," *Investor's Business Daily*, August 20, 2001, p. A20.
61. T.J. Rodgers, *Why Silicon Valley Should Not Normalize Relations with Washington, D.C.* (Washington: The Cato Institute, 2000), p. 1. For further reading, see Adam Thierer, "Broadband Tax Credits: The High-Tech Pork Barrel Begins," Cato Institute *TechKnowledge*, July 13, 2001, www.cato.org/tech/tk/010713-tk.html; and Wayne A. Leighton, "Broadband Deployment and the Digital Divide: A Primer," Cato Institute Policy Analysis no. 410, August 7, 2001, www.cato.org/pubs/pas/pa-410es.html.
62. Adam Thierer, "Two Bizarre and Backward Ideas for Broadband Deployment," Cato Institute *TechKnowledge* no.9, May 23, 2001, www.cato.org/ech/tk/010523-tk.html.
63. U.S. House of Representatives, "Stearns Presents Outline for Federal Statement on Information Policy," Press release, October 12, 2001, www.house.gov/stearns/pr011012.htm.
64. Drew Clark, "Muris Reiterates Opposition to Privacy Legislation," *National Journal's Technology Daily*, November 7, 2001.
65. Katherine Mieszkowski, "Thank God for the Internet," *Salon*, Interview with Michael Lewis, author of *Next*, July 18, 2001, http://www.salon.com/tech/feature/2001/07/18/michael_lewis.
66. Jonathan Bick, author of *101 Things You Need to Know about Internet Law*, interview by Doug Isenberg of GigaLaw.com, www.gigalaw.com/bookshelf/101-things-internet-law-p1.html.
67. Eugene Volokh, "Freedom of Speech and Information Privacy: The Troubling Implications of a Right to Stop Others from Speaking About You," *Stanford Law Review* 52 (2000), www.law.ucla.edu/faculty/volokh/privacy.htm.
68. "Protecting Consumers' Privacy: 2002 and Beyond," Remarks of FTC Chairman Timothy J. Muris to the Privacy 2001 Conference, Cleveland, Ohio, October 4, 2001, www.ftc.gov/speeches/muris/privisp1002.htm; Tom W. Bell, "Internet Privacy and Self-Regulation: Lessons from the Porn Wars," Cato Briefing Paper no. 65, August 9, 2001, www.cato.org/pubs/briefs/bp-065es.html; Wayne Crews and Adam Thierer, "Anonymity in America: Does National Security Preclude It?" *TechKnowledge* no. 24, October 11, 2001, www.cato.org/tech/tk/011011-tk.html; Adam Thierer and Wayne Crews, "Cyber-Surveillance in the Wake of 9/11," *TechKnowledge* no. 20, September 18, 2001, www.cato.org/tech/tk/010918-tk.html; Wayne Crews, "Policymakers Should 'Opt-Out' of Privacy Legislation," *Daily Commentary*, March 13, 2001, www.cato.org/dailys/03-13-01.html; and Solveig Singleton, "Privacy as Censorship: A Skeptical View of Proposals to Regulate Privacy in the Private Sector," Cato Policy Analysis no. 295, January 22, 1998, www.cato.org/pubs/pas/pa-295.html.
69. For a more detailed description, see Maureen Sirhal, "House Judiciary Panel Preps to Take On E-Gambling," *National Journal's Technology Daily*, November 28, 2001.
70. *Ibid.*
71. Noted in Fred L. Smith Jr., "Don't Tax the Net," *Economic Affairs* 20, no. 1 (March 2000), www.cei.org/OpEdReader.asp?ID=1251.
72. Lisa S. Dean, "Bet On Internet Gambling," *Washington Times*, July 11, 2000.
73. Wendy McAuliffe, "Senator Calls for Encryption Crackdown," *ZDNet News*, September 14, 2001, www.zdnet.com/zdnn/stories/news/0,4586,2812463,00.html?chkpt=zdnnp1tp02.

74. "McDonald's Applauds FBI Action, Announces \$10 Million Instant Give-Away for Customers," Press release, August 20, 2001, www.cheril.com/mcdonald/press_release_8-21-01.htm.
75. "States Will Be Losers if Congress Regulates Internet Gambling, Press statement and testimony of the Free Congress Foundation," November 29, 2001.
76. Keith Perine, "Online Gambling Curb Approved," *CQ Weekly*, November 3, 2001, p. 2619.
77. Rep. Ron Paul's Opening Statement on the Markup of H.R. 4419.
78. Michael Singer, "French Nazi Ban on Yahoo! Ruled Invalid," *Internet.com*, November 8, 2001, siliconvalley.internet.com/news/article/0,,3531_920181,00.html.
79. Tom W. Bell, "Internet Gambling: Popular, Inexorable, and (Eventually) Legal," Cato Institute Policy Analysis no. 336, March 8, 1999, www.cato.org/pubs/pas/pa-336es.html; and Wayne Crews and Adam Thierer, "Anonymity in America: Does National Security Preclude It?" Cato Institute *TechKnowledge* no. 24, October 11, 2001, www.cato.org/tech/tk/011011-tk.html.
80. Andrea Peterson, "Carriers Install Better Gear, Use Roving Fix-it Vehicles But Quality is Still an Issue," *Wall Street Journal*, July 23, 2001, p. B1; "Cellular Without Static," *Consumer Reports*, February 2001, pp. 12-18.
81. Yochi J. Dreazen, "Cellular Towers Get Static from Environmentalists," *Wall Street Journal*, July 23, 2001, p. B1; Malcolm J. Tuesley, "Not in My Backyard: The Siting of Wireless Communications Facilities," *Federal Communications Law Journal* 51 (no. 3): 887-911.
82. Federal Communications Commission, "FCC Announces Wireless Spectrum Cap to Sunset Effective January 1, 2003," *FCC News*, November 8, 2001; and Yochi J. Dreazen, "FCC to Boost Amount of Wireless Spectrum a Cellular Company Can Own in a Market," *Wall Street Journal*, November 8, 2001, p. B6.
83. See Dan Briody, "Dead Air over America," *Red Herring*, September 15, 2001, pp. 43-48; Kendra Wall, "Splitting the Spectrum," *Upside*, September 2001, pp. 82-86; and Norman Ornstein, "All-But-Secret Battle Rages Over Fate of the Airwaves," *USA Today*, September 5, 2001, p. 15A.
84. *Semi-Annual Wireless Industry Survey*, Cellular Telecommunications and Internet Association, www.wow-com.com/industry/stats/surveys.

Published by the Cato Institute, Policy Analysis is a regular series evaluating government policies and offering proposals for reform. Nothing in Policy Analysis should be construed as necessarily reflecting the views of the Cato Institute or as an attempt to aid or hinder the passage of any bill before congress. Contact the Cato Institute for reprint permission. Additional copies of Policy Analysis are \$6.00 each (\$3.00 each for five or more). To order, or for a complete listing of available studies, write the Cato Institute, 1000 Massachusetts Ave., N.W., Washington, D.C. 20001, call toll free 1-800-767-1241 (noon - 9 p.m. eastern time), fax (202) 842-3490, or visit our website at www.cato.org.