
Regulation in financial translation

Respecting Consumers: Strategic Regulation in a World Full of Choices

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• The choices consumers are making in the communications marketplace make it clear both that their needs are becoming increasingly complex and that they can choose among various providers to satisfy their needs.

• Because consumers are so heterogeneous, because they often seek products and services that substitute for and complement each other rather than seeking only direct competitors, and because the market is supplying those products and services, the role of regulation in this market has to change and change radically.¹

• One-size-fits-all regulation of one set of providers can only result in forcing those providers to fail and exit the market. That will reduce consumers’ choices, rather than enhance them.

• The key question for regulators today is not how to protect a homogenous group of consumers, but how to understand and respect the choices of the vast majority of consumers while still protecting those specific groups that remain vulnerable and whose needs cannot be met via companies operating conventional business plans.

• Effective regulation, which will enhance consumer choice while protecting those consumers who still need protection in this diverse marketplace has to be strategic and, above all, carefully targeted.

• Because consumers are increasingly technology-neutral, regulation must become technology-neutral, and that technology-neutrality must translate into regulatory-neutrality.

Now that the communications industry has concluded its third-quarter reporting, it is clear that consumers continue to exercise their choices. Consumers continue to move their voice service from traditional telcos to wireless, cable, and over-the-top-VOIP. At the same time, consumers are also migrating their video service (albeit in smaller numbers) from traditional cable to DBS and telco-video, while over-the-top-video continues to grow. Cable continues to dominate wired broadband, but wireless broadband is growing rapidly both in terms of subscribers and usage. The wireless industry gained 4.9 million subscribers in the third quarter², satellite gained 0.2 million video subscribers, while telcos lost 2.1 million voice subscribers but gained 0.3 million video subscribers and 0.1 million broadband subscribers, and cable lost 0.4 million video subscribers but gained 0.2 million voice

subscribers and 0.4 million broadband subscribers. At the same time, Skype claims 20 million new users per month, while Netflix streams videos to over 21 million U.S. subscribers.

Consumers are also exercising multiple choices, in many cases subscribing to combinations of wired, wireless and Internet voice, just as they are combining traditional one-to-many video with on-demand video both fixed and mobile. In fact, today a “communication” can mean a voice call of some sort—traditional PSTN or VOIP, wired or wireless—but may also likely to mean a text, an email, a Facebook visit, a video clip, a photo, or a video chat. The Pew Research Center’s August 15th report on Americans and their cell phones shows that 92% of smartphone users text and 76% email, 80% send a picture or video, and 59% access a social networking site. The Center’s May 30th report indicates that 24% of Internet users—i.e., 19% of American adults—have made phone calls online and the Center’s July 25th report indicates that 71% of online adults use video-sharing sites. These various modes of “speaking” can both complement and substitute for each other.

Indeed, as of the end of 2010, incumbent local exchange carriers (ILECs, telcos) retained only 46% of the voice-telephony market. As of the end of 2010, roughly 30% of U.S. households had cut the cord altogether, relying entirely on their wireless phones. Another 19% of households had chosen their cable company for voice service, for the most part using Voice-over-IP (VOIP) rather than the traditional circuit-switched telephony still used for most ILEC consumer lines. Yet another 5% of households opted for interconnected-VOIP. Another way of looking at this issue is that in the last decade, ILECs have lost 46% of access lines, 57% of interstate access minutes, while households have actually increased by 15%. The broadband-access market today is led by cable modems with 32% household penetration, with DSL second at 23%, mobile broadband at 6%, fiber at 3%, and satellite at 2% (measured as of the end of 2010). But perhaps the most important—albeit more difficult to quantify—trend is the substitution of non-voice communication for voice, with a text or email or social networking contact substituting for a voice call.

12 FCC Local Competition Reports are sources for ILEC lines, NECA reports on the FCC website are sources for interstate access minutes, and housing units are sourced from the 1990, 2000, and 2010 Census.
These facts are usually debated in the regulatory arena in the context of market dominance, rather than as indicators of consumer preferences. The issue is usually posed as “Does a loss of 54% market share mean that an industry-segment is no longer dominant?” rather than as “What value can regulators add to consumers who are able to express their own preferences by migrating among a variety of competing, substituting, and complementary vendors?”

Yet, if one can look past the legal framework that is based on the dominance criterion, it is clear that in such an actively churning market in which consumers are moving about in all directions with happy abandon, regulators must stop seeing their role as the primary speakers for a homogeneous group of consumers. Instead, regulators must redefine themselves as the protectors of specific subgroups of consumers who still need protection because they are especially vulnerable for some reason and because the market is not responding effectively to that vulnerability. Across-the-board regulation must be replaced with strategic regulation.

When more than half of the consumers who once used ILEC voice-telephony have voted with their feet and moved to other providers, they have made it clear that they value something different than the traditional services ILECs have on offer. In exchange for availability-anywhere, they will accept “can you hear me now?” In exchange for an appealing bundle-price that includes the video-package of their choice, they will give up 99.9999% voice reliability. The reality is that a majority of consumers no longer want the plain-old-telephone service (POTS) that regulators insist the ILECs provide to them. Some still do, but as every quarter that passes makes painfully clear, their number is still decreasing sharply.

The issue that should concern regulators is not that providers are becoming more or less dominant, or suffering from or enjoying these massive shifts of market share. The relevant point is that consumers are moving among providers because they want a variety of products and services that are available in a variety of mix-and-match forms in the marketplace. Consumers’ “churn” indicates both that their needs
are becoming increasingly complex and that they can choose among various providers to satisfy their needs.

The fact that those providers’ offerings are not identical—i.e., they are not perfect competitors—is precisely what makes them effective in satisfying a heterogeneous group of consumers. Because the offerings are substitutes and complements rather than identical competitors, they can satisfy a variety of complex tastes. A consumer might ask her spouse to pick up the children after school by calling him on a landline before leaving home, from her mobile during her morning commute, or via a text or email on a smartphone or laptop during a meeting with colleagues. To that consumer, all of those variations are acceptable alternatives that accomplish the same goal, and regulators need to extend their market definitions to match those of consumers. Communications consumers are proving by their choices that they are seeking complex and often-changing sets of complementary products and services that substitute for each other—they are not interested in identical direct competitors. IM’s popularity has been supplanted by SMS. Video clips are supplanting voice calls. And the changes are occurring with dizzying rapidity.

Thus, the real question regulators need to examine is not whether ILECs are dominant, but why they are still offering products and services that so many consumers have made it clear that they do not want. The answer in some cases is that consumers are seeking a feature that no fixed-line service—ILEC or cable—can offer: mobility. In that particular case, consumers are obviously willing to trade off an extraordinarily high level of reliability in a fixed location for constant availability in ever-changing locations. In other cases, the trade-offs may be very different, involving combinations of complementary products and services that are bundled together in particular packages at various prices.

But all too often the answer is that the ILECs are offering undesired products, services, or features at too-high prices driven by artificially raised costs, because they are being forced to do so by their regulators. While consumer preferences move at warp-speed, ILECs are still hobbled by numerous regulatory requirements that raise their cost of service, and limit their flexibility to modify their networks and thus their offerings. Examples include various performance standards, a ubiquitous-service requirement regardless of cost-to-serve or revenue opportunity, rate regulation including some requirements for rate uniformity (e.g., uniform national long-distance rates). The first two examples result in higher cost, while the uniform rate requirement makes it difficult to respond to offerings from competitors who are permitted to cherry-pick the market. From the perspective of consumers, the problem this creates is that they are deprived of the choices that the ILEC could offer them, if allowed to operate without excess costs and if allowed to price without cross-subsidies.

To any marketing expert looking at the U.S. consumer communications market, the first obvious point is that it is by no means a homogeneous market. A diverse range of consumers seek to satisfy communications needs that they define very broadly, and they are finding an extraordinary range of ways in which to fulfill those needs. A “communication” that 20 years ago would have consisted of either a call or a piece of physical mail or a telegram today may consist of a voice call over a range of devices via a range of networks, but it is just as likely to consist of a text message, an email, a video chat, a photo, a visit to a social-networking site, or some combination of several of these.
To succeed in this diverse market, providers have to be able to satisfy those varied and complex needs, and do so at competitive prices. Providers who are forced to supply products and services that consumers do not want will fail, as will providers whose prices on desired products and services are forced above those offered by their competitors by unnecessary excess costs. When they fail, consumers will suffer from a massive reduction in the choices that are open to them today.

To understand the full magnitude of this issue, it is helpful to put POTS in the broader context of overall U.S. and global communication traffic. Cisco’s Visual Networking Index (VNI) indicates that in 2010, global IP traffic amounted to 20.2 Exabytes per month, with the U.S. accounting for about a quarter of that at 4.5 Exabytes per month. Global consumer traffic accounted for 80% of global IP traffic. However, of that consumer traffic, only 18% can be described as any type of “personal communications”—VOIP, web, email, data, and video calling. The vast majority of global consumer IP traffic in 2010 consisted of file sharing (31%), Internet video (29%), and managed-IP which is also video (23%). Cisco VNI forecasts a continuation of these trends, with the “personal communication” categories accounting for even less of the total consumer IP traffic at 14% by 2015. Similarly, U.S. consumer IP traffic in 2010 was 82% of the U.S. total and is expected to grow to 88% by 2015. As was the case globally, video was the key driver of this traffic, amounting to 55% of consumer Internet traffic in 2010, and is expected to become even more significant in 2015, growing to 70% of U.S. consumer Internet traffic.$^{14}$

U.S. POTS traffic, i.e., switched voice communication, was miniscule in relation to IP traffic. There were 240 billion U.S. billed interstate switched access minutes of use in 2010, according to NECA’s 2011 filing with the FCC. That translates to an annual rate of 115 Terabytes, or 9.6 Terabytes per month. In other words, switched interstate voice traffic in 2010 equated to 0.0002% of U.S. IP traffic and it is fair to assume that all U.S. switched voice traffic amounted to less than 0.001% of the traffic carried on U.S. IP networks.

Yet, that infinitesimally tiny amount of switched voice traffic commands its own separate network with its own very different and much higher set of costs than IP. The irony is that consumers are demonstrating in droves that they don’t really care for the characteristics that result from switched rather than IP networks. The majority has abandoned POTS. They want “What I want, when I want it, how I want it, where I want it, within my acceptable price range”—and they are getting it in this world of on-demand, mobility, and multiple providers of reasonably close substitutes and complements.

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One-size-fits-all regulation of one set of providers can only result in forcing those providers to fail and exit the market. That will reduce consumers’ choices, rather than enhance them. For example, the most certain way to ensure that cable will provide the only wired form of broadband service is to force ILECs to provide voice services consumers don’t want. Effective regulation, which will enhance consumer choice while protecting those consumers who still need protection in this diverse marketplace has to be strategic and, above all, carefully targeted.

Just as providers in the market must ask how they can add value to consumers, so must regulators. Under monopoly, it was the role of the regulator to stand in for the powerless consumer, to make choices for the consumer, and force suppliers to provide the products and services that regulators believed would meet the consumer’s needs. That is no longer the case. Consumers have made it obvious by their behavior that there is nothing generic about them, and they cannot be helped by regulators who treat them as a homogeneous group with identical needs and desires. Indeed, such behavior by regulators can only result in reduced choices for consumers, because regulated companies are forced to provide undesirable homogeneous products—often at artificially high cost—demanded by regulators rather than those products consumers actually want.

To be effective, regulators must first recognize that each consumer is an individual competent to make his or her own choices and must respect that competence. They must also recognize that in most cases, the communications market is responding to those choices, and that regulatory intervention would be counter-productive. However, there are still groups of consumers who are vulnerable, for example, because of poverty, disability, or remote location. If the market is not satisfying their needs, because there is no rational business case for doing so, then regulators may need to step in.

Thus, regulators must first ask the same series of questions that a provider would ask:

- What groups of consumers are there in this market?
- What do they each want? Are they getting it? If not, why not? Is it a problem if they don’t? Will the problem solve itself?
- Are they getting things they don’t want, such as lack of privacy, fraud, cramming?

Only after that analysis can each regulator turn to the most critical questions: “What do I have to offer them that they will not get without me?” and “How do I help these consumers without harming others?”

If regulators ask where they can add value to today’s communications market, it becomes clear that they have to ask two critical questions:

- Is this specific segment of the population vulnerable for some reason?
- Has the market failed to deal with that vulnerability?
Only if both of those criteria are met—vulnerability and lack of market response—is regulatory intervention likely to enhance rather than lessen consumer choice.

One example that meets both criteria is TRS/VRS. Providing translation services to hearing- or visually-impaired individuals is expensive, and often those individuals cannot afford the full cost of the service. These consumers are vulnerable, and there is no business case for a service that satisfies the needs of this small segment of the population without some subsidy.

Other examples are the Universal Service Fund’s Low-income and High-cost programs. Most U.S. consumers can and do pay for one or more communications services that are priced to cover the full cost of the service. They do not need to have their prices artificially lowered via rate-regulation. But there are individuals whose income is so low that they cannot afford to obtain communications services at those market-prices. The USF Low-income program is specifically targeted to meet their needs. Similarly, the USF’s High-Cost program is targeted to meet the needs of consumers who live in very rural areas where it is prohibitively expensive to provide communications services. By targeting low rates or subsidies that lower rates only to those who actually need them, regulators can protect those vulnerable individuals without depriving providers of the capital required for investment in the most modern infrastructure.

Proper targeting of each of these programs, as well as effective administration, can make them effective in serving each specific group of consumers, without overgeneralizing the regulatory response in such a way that it distorts the whole market. The cost of providing TRS/VRS is limited by providing that service only to those consumers who need it, not to the whole U.S. population. Subsidies via the Low-income program make it possible for consumers who are vulnerable because their income is low to obtain communications services. That relieves the need to regulate prices for the rest of the population, which is not vulnerable. Similarly, subsidies can be targeted specifically to provide service to rural consumers.
who are vulnerable because the low-density of the areas in which they live makes the cost of providing service there prohibitive.

In each of these cases, regulators can add value via strategic, targeted responses to specific cases in which the market is not responding to the needs of a vulnerable group of consumers.

That then frees regulators to respect the wishes consumers have expressed via their choices of products and services. Regulators can begin to explore questions such as:

- Does it make sense to insist on 99.9999% reliability, which requires a costly circuit-switched network architecture, when the majority of consumers have flocked to services that do not meet that standard?

- Once an effective Low-income program is in place to protect vulnerable consumers, does one-size-fits-all price regulation of rates help or hurt the vast majority of consumers? Does it limit consumers’ choices? Does it inhibit investment in infrastructure?

- Given that the majority of consumers no longer use the ILEC as the primary provider of voice service, and given that the vast majority of households have access to wireless service in addition to wireline, even if they do retain ILEC service, what benefit do consumers get from the continued imposition of carrier-of-last-resort (COLR) obligations on ILECs? How are consumers harmed by the excess costs imposed on ILECs via COLR obligations?

- What steps can be taken to encourage greater supply of the products and services various consumers want? Given many consumers’ clearly expressed desire for mobile services, how can the supply of spectrum be expanded? Are there steps regulators can take to enable providers to make more efficient use of already-available spectrum?

- Consumers are increasingly technology-neutral. They mix and match solutions to meet their needs at a given moment or place. A road-warrior may use a mobile network at an airport in the morning but connect the same laptop to a fiber network at home. A teen may communicate with friends via a mobile-network-connected cellphone from the mall, but via a cable-modem-connected laptop at home. How can regulators become equally technology neutral and how can they translate that technology-neutrality into regulatory-neutrality?

In a world of choices among a great variety of products and services that substitute for and complement each other, consumers need regulators to understand and respect their choices. There are still vulnerable consumers whose needs, for various reasons, cannot be met via conventional business plans and those consumers need and deserve the protection of regulators. But in order to maximize the choices available to all consumers, regulators must reassess their role strategically, recognizing that while they add value in some cases, they subtract value in others by limiting consumers’ options. They must recognize that in the communications market, there is no homogeneous “consumer”. There is, instead, a very diverse group of consumers with many needs and desires. Because of the diversity of
consumers, provider solutions must also be diverse, consisting of various sets of products and services that complement each other even as they often substitute for each other. The traditional view of a market that consists of straightforward roughly-identical competitors is both irrelevant and counter to the desires consumers have expressed via the choices they make daily. To maximize the choices available to consumers, regulators need to examine each of their actions strategically, asking “To whom will this act add value? From whom will it subtract value? How can it be targeted tightly to ensure a positive balance?”