Sustainable development of a nation's telecommunications infrastructure requires regulatory policies that satisfy both political feasibility and the economic conditions for maintaining a financially viable industry. Fulfilling the joint requirements of political feasibility and economic viability in the context of telecommunications deregulatory policies, in contrast to the traditional monopoly regimes, is becoming particularly difficult given the rapid rate of technological change, the growing complexities of communication technology, and the increasingly vital role of the information sector to global economies. In the United States, early warning signs of unsustainable deregulatory policies in the telecommunications industry include declining stock values and investments, bankruptcies, and growing customer service problems.

In addition, because of the development of digital technology, the telecommunications and mass media industries no longer serve fully separable economic markets. Rather, these industries now provide some substitutable services and uses. The economic interrelationships also create interdependencies among these industries' historically distinct regulatory regimes so that policy change within one regime may have spillover effects for the others.

Academic research purporting to offer policy recommendations must keep pace with the increasing difficulties of designing sustainable deregulatory policies in a world of digital convergence. To do so, analyses must become more interdisciplinary so as to simultaneously evaluate the interrelated economic and political constraints among the telecommunications and mass media industries.
This chapter seeks to contribute to the development of better interdisciplinary research by providing a framework for determining how economic viability and political feasibility problems jointly constrain the adoption and sustainability of reasonably achievable policy options for telecommunications regulation. Telecommunications scholars can use this framework to better identify attributes of policy options that facilitate or hinder sustainability, whether to develop new recommendations, critique others' recommendations, or evaluate the effectiveness of current policies. This chapter also seeks to improve scholars' understanding of the interrelationships of policy development among the telecommunications and mass media industries through illustrations of policy migration across regulatory regimes. For example, intermodal broadband competition introduces freedom of speech policy concerns to telecommunications and common carrier policy concerns to cable and the Internet.

This chapter is organized as follows. The next section reviews the necessity to address both economic and political constraints on policy choices. Based on prior research (Cherry & Wildman, 1999a, 2000), the third section reviews the economic viability constraints on policy choices that arise from the need to support private investment generally and to be compatible with the financial viability of specific firms or industries. The fourth section examines political feasibility constraints in three contexts: to support the legitimacy of government itself, to enable initial adoption of a policy, and to enable sustainability of a policy over time. This section also shows the interrelationship of political feasibility and economic viability constraints. In some cases, regulatory interventions may enhance governmental legitimacy as well as mitigate economic viability problems; in others, political feasibility constraints may require sacrifice of some economic efficiency objectives, or economic viability constraints may require modification or abandonment of some political objectives. The fifth section discusses some economic viability and political feasibility constraints on deregulatory telecommunication policies. The final section describes interrelated policy developments for telecommunications and mass media industries through examples of policy migration across regulatory regimes.

**ECONOMIC AND POLITICAL CONSTRAINTS ON POLICY CHOICES**

To date much academic research evaluating deregulatory policies has focused on the need to properly design regulatory incentives affecting behavior of private parties to better achieve desired policy goals. More recently, research has also emphasized the need to focus on the attributes of regulatory governance restraining the behavior of regulators in order to create a suitable environment for infrastructure investment (Cherry & Wildman, 1999a; Levy & Spiller, 1996). Furthermore, Cherry and Wildman (1999a) showed that the need to properly design both regulatory incentives and regulatory governance may require the sacrifice of some economic efficiency goals.

Prior research has contributed to an improved understanding of how to design and enforce regulatory rules—both regulatory incentives and regulatory governance—that are compatible with achieving the desired economic behavior of private parties. Such
research has encouraged government officials to better understand the constraints that the economic viability needs of firms and industries impose on public policy goals and associated regulatory designs. In so doing, many policy prescriptions have been made that appear, at least theoretically, to be quite straightforward.

Yet many such policy prescriptions—for example, rebalancing retail rates and funding universal service through explicit charges on consumers’ bills—tend to pose politically infeasible solutions (Cherry, 2000; Cherry & Nystrom, 2000). For this reason, it is important not only for policymakers to better understand the economic realities that limit achievability of policy goals, but also for all parties attempting to influence the policy process to be aware of the political constraints that limit policymakers’ choices. Likewise, academic research offering policy recommendations must integrate relevant economic and political constraints.

**ECONOMIC VIABILITY CONSTRAINTS ON POLICY CHOICES**

The economic realities of providing goods and services through private entities place constraints on the design of regulatory rules, both regulatory incentives and regulatory governance, likely to achieve desirable social objectives. Cherry and Wildman (1999a, 2000) discussed the nature of the economic constraints that affect the design of regulatory rules to achieve policy objectives based on reliance on private investment to provide telecommunications infrastructure and services. Based on this prior research, this section provides an overview of the types of economic problems that must be satisfactorily addressed through appropriate regulatory design in order for public policy objectives to be economically sustainable over time. Although much of the prior work has been done through evaluation of economic problems in the context of governance under the U.S. Constitution, the fundamental types of economic problems remain the same across governance structures. This overview not only summarizes admonitions to policymakers of how to prevent economic problems through a better regulatory design, but it also lays a foundation for the discussion in the next section of how policy experts and stakeholders need to address mirror-image political sustainability problems that policymakers face.

**Supporting Private Investment Generally**

This subsection reviews economic viability constraints on policy choices that arise from the need to support private investment generally. Cherry and Wildman (1999a, pp. 613–619; 2000, pp. 64–74, 81–85) provide a more in-depth discussion of the points covered in this subsection.

Government’s own performance influences what can be achieved by private entities in a system of voluntary exchange. Through rules affecting transactions among parties, whether public or private, government affects the long-term certainty and risk that parties face. The levels of uncertainty and risk, in turn, affect the profitability of investment and commercial activities.
Government contributes to the viability of the market itself through definition and enforcement of private property rights and rules of contract. However, these rules must constrain government as well as private party behavior. For example, constraints on government's eminent domain power protect private party investment by reducing the risk of government confiscation of private property. Under the U.S. Constitution, both the federal and state governments are prohibited from taking private property for public use without providing just compensation.

Similarly, government must be held accountable for the breaches of contracts for which it is responsible. First, there need to be constraints on government action that impairs contracts between private parties. Second, government should be held liable for its breach of a contract to which it is a party. Such enforceability is necessary to ensure that government can, in fact, make credible commitments and thereby preserve its capacity to make contracts in the future. In the United States, state governments are constrained by the Contract Clause of the U.S. Constitution, with similar constraints imposed on the federal government by the U.S. Supreme Court in *United States v. Winstar Corporation* (1996).

Such constraints on government as well as private party behavior serve to generally support economic investments of individuals and firms relying on the underlying systems of property rights and contracts. These constraints are also critical for supporting private investment in utility infrastructures, such as telecommunications, that are characterized by high sunk costs. Differences in telecommunications sector performance among nations can be traced to problems in their respective regulatory governance structures (Levy & Spiller, 1996).

**Compatibility With Financial Viability of Firms or Industries**

Even if a system of regulatory rules generally supports private investment in the market, rules applied to a specific sector or industry may not be compatible with the economic viability of the affected firms or industries. As a result, the desired economic performance and social consequences underlying policymakers' objectives may not be forthcoming. Cherry and Wildman first discussed these problems in the context of developing universal service policy for the telecommunications industry (1999b), and then expanded the analysis for public utilities and economic activities in general (2000). This subsection summarizes those attributes of regulatory design that create firm or industry viability problems that may undermine fulfillment of underlying or related policy objectives.

Regulatory rules may pose economic viability problems for a given firm or industry, among firms within a given industry, or among industries. For simplicity, the collective set of such economic viability problems will be referred to as interfirm or interindustry viability problems. These interfirm or interindustry viability problems may be either prospective or transition problems.

**Prospective problems** arise from the prospective effects of government rules that: (a) treat some firms or industries differently than others, whether on a per se or de facto basis; (b) impose unreasonable and fundamentally unremunerative financial obligations on firms or industries; or (c) require compliance with coexisting yet conflicting or incompatible rules. An example of the first type is the application of different tax laws to providers
of competing services, such as facilities-based carriers and resellers. An example of the second type is a cross-subsidy requirement or price control that amounts to confiscation of property. The third type includes coexisting, conflicting federal and state requirements for which simultaneous compliance is impossible. Cherry and Wildman (2000) discussed how certain clauses of the U.S. Constitution provide protection and relief from some of these prospective problems.

Transition problems arise from changes in governmental rules that affect the earnings on preexisting investments, contracts, or conduct, and thereby the willingness of private actors to rely on government commitments in planning future economic endeavors. For example, elimination of an incumbent local exchange carrier’s (ILEC’s) monopoly rights and imposition of asymmetric requirements on an ILEC to provide access to its facilities to competitors will affect the ILEC’s ability to recover preexisting investment made during the monopoly regime as well as its willingness to make future investments. Cherry and Wildman (2000) also discussed how certain clauses of the U.S. Constitution provide protection and relief from some transition problems.

To address these prospective and transition problems, specific remedies or adjustments to regulatory design are required. In some cases, monetary compensation may suffice to offset the nature of the financial inviability. In others, the offending rule(s) may need to be modified or even eliminated.

Analysis of regulatory rules for prospective and transition problems can be a useful tool to help government face the challenges of designing and enforcing regulatory rules in an increasingly technologically dynamic and unpredictable information economy. Such analysis illustrates how government’s actions or inactions can create prospective and transition problems for particular firms or industries. It can also facilitate policymakers’ ability to anticipate and prevent problems through more thoughtful, initial regulatory design.

POLITICAL FEASIBILITY CONSTRAINTS ON POLICY CHOICES

Policy choices likely to fulfill underlying policy objectives are constrained by political feasibility problems. This section provides a framework to facilitate mutual understanding, among policymakers and those attempting to influence them (whether policy experts, industry members, or other stakeholders), of the political constraints inherent in the policymaking process.

In so doing, this section explains how certain political feasibility constraints arise from the need to support the legitimacy of the existing government itself, whereas others arise to enable a given policy to remain in force over time. These two types of situations can be thought of as mirror-images of the economic viability constraints arising from the needs to support private investment generally and to be compatible with the ongoing financial viability of the specific firms or industries. However, some political feasibility constraints are endemic to the initial adoption of any specific policy proposal that must be considered separately, and, in addition, to the sustainability of that policy over time. These constraints are discussed utilizing Kingdon’s model (1995) of the policymaking process.
Supporting the Legitimacy of Government Itself

Successful pursuit of policy objectives requires, perhaps most fundamentally, that regulatory intervention be constrained by those limitations on government action that support the legitimacy of the government itself. The legitimizing principle of political authority in the modern state is the principle of popular sovereignty, which contrasts with traditional bases of theocracy, divine right, noble birth, or caste (Finer, 1999, p. 1474). The principle of popular sovereignty affirms that no government is legitimate and hence obedience-worthy unless it can demonstrate to its subjects that its powers have been conferred by them. This dogma, it must be noted, is neutral—it does not predicate any particular form of regime; it will accommodate liberal-democracy, autocracy, oligarchy, even totalitarianism, providing only that the office-bearers are able to convince the public they have received office by popular mandate—whatever this is (and however contrived). (Finer, p. 1476)

Under a government based on popular sovereignty, the importance of a government’s adherence to self-imposed limitations on its power to retain its legitimacy and stability has often been explained by social contract theory. Several philosophers—Hobbes, Locke, Rousseau, and Kant—are associated with the development of social contract theory. Interpretations of social contract theory differ, such as whether the social contract is merely a legal fiction for legitimizing a political community or represents historical fact (Allen, 1999; Kary, 1999; Priban, 2003; Rosenfeld, 1985). Nonetheless, the concept of social contract is a helpful analytical tool for understanding the development and maintenance of sovereign authority (Black, 1993; Hoepfl & Thompson, 1979).

Social contract theory can be defined as

the view that human authorities are established by agreement with their subjects for specific tasks, that their legitimacy depends upon fulfillment of these tasks, and that such agreements may be enforced by clear, defined procedures, as one would enforce a contract in private law. (Black, 1993, p. 57)

The specific limitations to which a given nation’s government has acceded will vary, of course, with the social contract and associated governance structure of that nation. Direct limitations consist of judicially enforceable guarantees that specifically deny government the right to engage in certain actions or to exercise certain types of authority. Indirect limitations consist of governance structures, such as separation of powers or a system of checks and balances among branches of government, that constrain use of government power (Strong, 1997, pp. 7–12). For a given nation, the core values expressed in direct or indirect limitations must be recognized as political (as well as legal) feasibility constraints on regulatory intervention.

In the United States, direct and indirect limitations of power are provided in the Federal Constitution. Some of the core values in the U.S. Constitution are found in the Bill of Rights, which directly limit any use of government power in order to protect specific individual rights and liberties. Other core values are reflected in U.S. constitutional principles designed to address specific problems of equity and fairness that correspond
to the four sources of economic viability (prospective and transition) problems discussed in the previous section. More specifically, certain constitutional principles are based on values of equity and fairness that limit or prohibit:

2. Rules that impose unreasonable burdens.
3. Imposition of coexisting yet conflicting or incompatible rules.
4. Changes in rules affecting preexisting investment, contracts or conduct.

This interrelationship between economic viability and equity/fairness problems is depicted in Table 5.1, which is based on a rearrangement of the information in Tables 1 through 4 in Cherry and Wildman (2000, pp. 94–99).

Thus, how government addresses problems of equity and fairness is directly related to potential sources of economic viability problems for specific firms or industries. By recognizing this interrelationship, it may be possible—with appropriate judicial enforcement of constitutional principles—to design regulatory interventions that both enhance governmental legitimacy as well as mitigate economic viability problems faced by the regulated firms and industries. Conversely, some regulatory interventions may simultaneously undermine government legitimacy and policy objectives that depend on the economic viability of the regulated entities. In any event, the ability to design regulatory interventions with such dual properties is greatly enhanced not only if policymakers better understand the economic viability constraints on regulated firms and industries, but also if those attempting to influence policy choices, understand the equity and fairness constraints on policymakers (Cherry & Wildman, 2000, pp. 93–105).

Regulatory intervention in other nations requires a similar examination of the core values underlying the given nation's social contract. These values and their enforcement will necessarily create political constraints on the policy options that can be adopted and maintained over time. Examining the interrelationship among these political and associated economic viability constraints greatly enhances the opportunity to design policy options that satisfy all the constraints.

### Enabling Initial Adoption of a Policy

In addition to the political constraints arising from the need to support legitimacy of government itself, a policy choice is constrained by the circumstances prevailing at the time of its adoption. These constraints are endemic to the policy decision-making process itself. Kingdon (1995) has developed a model of this process. It has been applied to policy decision-making affecting the telecommunications industry. Zahariadis (1992, 1995) studied the political processes of privatization decisions in Britain and France. Cherry (2000) applied the model to explain the adoption of different rate rebalancing policies by the federal U.S. and European Union policymaking bodies.

Kingdon's model is utilized here to identify political constraints relevant to the initial adoption of a policy. Its components are briefly described here. The model is discussed more fully in Kingdon (1995) and Cherry (2000).
Kingdon described policy decisions as the outcome of three processes—the problem, policy, and political streams—that are coupled during windows of opportunity. Each stream is affected by its own institutional structures, but they also interact. Windows of opportunity are created by changes in the problem or political streams, during which policy entrepreneurs attempt to couple the three streams to produce the policy outcomes they desire.

The problem stream is the process whereby policy problems are defined and rise to a sufficient level of urgency that they find a place on policymakers’ agenda (Kingdon, 1995, pp. 113–114). The policy stream is the process of developing and selecting alternative policy
solutions through consensus within the policy community. The criteria for acceptance of a policy solution are technical feasibility (economic and legal abilities to implement the solution), value acceptability (compatibility with values of members of the policy community) and anticipation of future constraints (anticipating acceptability of the solution in the political stream) (Kingdon, pp. 131–139). The political stream is the process of developing consensus on policy issues in the broader political environment through coalition building (Kingdon, pp. 144–149). Windows of opportunity are the opportunities for advocates of policy proposals to push their solutions or to draw attention to their special problems. A window of opportunity is created by a change in the problem or political stream, such as a crisis, a disaster, or a turnover in administrative or elected officials.

Coupling of the three streams by policy entrepreneurs during windows of opportunity is the critical step for producing policy outcomes. The coupling process is a challenging one: many windows of opportunity are unpredictable and open only for a limited time; policy entrepreneurs compete to exploit windows of opportunity for which outcomes are unpredictable; and the interdependence of the streams contributes to the complexity of their coupling (Kingdon, 1995, pp. 168–190).

The implications of understanding Kingdon's model are that political considerations dominate the ability to develop and adopt policy outcomes. For the problem stream, the policymakers' views of economic viability problems control the policy agenda. For the policy and political streams, the policymakers' views of political feasibility ultimately determine both the attributes of a proposed policy solution and the political strategy deemed necessary for its adoption.

**Policymakers' Views of Economic Viability Problems**

Policymakers identify and define the policy problems of sufficient urgency to be placed on their agenda. For policy problems arising from economic viability problems of firms or industries, policymakers' views of economic viability problems are critical and affected by several factors. First, their views are influenced by their perceptions of prior policy choices and the impact on economic behavior of parties. Policymakers' reliance on prior experience contributes to path dependence, which explains why most policy change is incremental and major policy change requires the intervention of strong conjunctural forces (Hall, 1986; Wilsford, 1994).

Second, policymakers' perceptions of policy problems are influenced by various information sources, which are likely to provide a wide range of often conflicting perspectives. One source consists of the representatives of affected firms, industries, or other special interest stakeholders, who selectively produce and present information to reflect their respective strategies. Another source includes experts, who—whether on their own initiative or on behalf of affected parties—attempt to influence policymakers' perceptions through research and studies. Mass media may report relevant information or provide their own perspectives. Government entities may directly collect and evaluate relevant data.

Third, limited time and resources compel policymakers to compare and rank the importance of many, often unrelated, policy problems. This task is often further confused by actions of information sources on which policymakers rely.
**Policymakers’ Views of Political Feasibility**

Assuming that an economic viability problem ranks highly on the policy agenda, policymakers’ views of political feasibility ultimately determine the attributes of the selected policy option and the political strategy deemed necessary for its adoption.

Policymakers select a political strategy based on their perceptions of what is politically possible under existing circumstances. In this regard, the process of coalition building in the political stream is essential. Kingdon’s model identifies the critical components for developing consensus on policy issues in the broader political environment as: evaluation of the organization of political forces in support or opposition, perceived public opinion, and other politician approval.

Policymakers’ assessment of these components is affected by prior experience with successful or failed policy initiatives and of constituent expectations of equity and fairness. Their assessment is also affected by their own political objectives, often posing principal-agent problems in which personal long-term political objectives may foreclose pursuit of more socially beneficial policy options. For example, policymakers favor *credit claiming strategies* when a policy option produces concentrated constituent benefits and diffuse losses and forces of political opposition. However, given the negativity bias of voters (i.e., constituents respond more to losses than to gains), policymakers favor *blame avoidance strategies* when a policy option requires retrenchment of substantial benefits from a concentrated group of constituents but confers relatively small benefits to a diffuse group of constituents, thereby imposing significantly lower transaction costs to organize political opponents rather than supporters (Pierson, 1994; Weaver, 1986). In contrast to credit claiming strategies, *blame avoidance strategies* consist of distinctive tactics to diffuse political opposition (Pierson, p. 8), such as obfuscatory tactics to decouple the relationship between the desired policy and its negative consequences; avoidance of deciding critical policy elements through delegation to other governmental entities; and compensation to victims of retrenchment (Pierson, pp. 19–26; Weaver, pp. 384–390). Blame avoidance strategies contribute to the path dependency of preexisting, even failing, policies (Weaver, pp. 393–395).

The selection of a political strategy is also interrelated with the attributes of the proposed policy solution selected from the *policy stream*. As previously mentioned, the criteria for acceptance of a policy solution in the policy stream are technical feasibility, value acceptability and anticipation of future constraints. To satisfy these criteria, members of the policy community need to incorporate the political problems of adopting a policy option (reflected in the perceived need to use credit claiming or blame avoidance strategies) into the substantive dimensions of proposed policy solutions. Failure to incorporate attributes of the political strategy into proposed policy options within the policy community may result in the lost opportunity to adopt beneficial policy options.

Of course, successful adoption of any policy option requires coupling of the problem stream, policy stream, and political stream during requisite windows of opportunity. Although some windows may open because of features of existing governance structure or policies, such as statutory sunset clauses, most are difficult to predict. However, sensitivity to conditions likely to open such windows, and “softening up” of policymakers to facilitate receptivity for desired action when a window opens, can enhance successful coupling (Kingdon, 1995, pp. 168–186).
Enabling Sustainability of a Policy Over Time

Even if the problem stream, policy stream, and political stream are successfully coupled during a window of opportunity to enable initial adoption of a policy option, fulfillment of the underlying policy objectives requires sustainability of the policy over the relevant time frame. In this way, political feasibility constraints affecting effectiveness of policy choices over time is the mirror image of economic viability constraints. The ability to retain a policy over time requires analysis of the problems associated with subsequent efforts of retrenchment. This requires a dynamic, not static, assessment of the policy decision-making process over time.

Weaver (1986) and Pierson (1994) described the uniqueness and difficulties of retrenchment politics, some aspects of which have previously been discussed. Political scientists have also examined the characteristics of policies that tend to better withstand attacks of retrenchment. Perhaps most relevant to the consideration of adopting sustainable telecommunications deregulatory policies are the conclusions of research in the context of social welfare programs. Cherry (2003a) discussed how public utility regulation can be understood as an early form of welfare state regulation, bearing similar policy retrenchment problems.

In democracies, universalistic programs are more politically sustainable than targeted ones (Mishra, 1990; Skocpol, 1995; Wilson, 1987). The underlying reason is that the more broadly defined the group of beneficiaries, the broader will be the support from constituencies for maintaining the existing policy notwithstanding changes in circumstances affecting the problem stream, policy stream, or political stream. For this reason, universalistic programs are more politically sustainable even if they are more expensive than policies targeted solely on the poor or marginal groups (Skocpol, pp. 250–253). Consequently, some political scientists advocate “targeting within universalism,” that is, addressing the needs of the less privileged through programs that include more advantaged groups (Skocpol, pp. 267–272; Wilson, pp. 118–124). This recommendation is in stark contrast to those of many economists who advocate, for example, narrowly targeted universal service programs as a component of telecommunications deregulatory policy in order to minimize the funding burden.

Skocpol (2000) also identified other characteristics associated with successful social policy programs in the United States. These are: (a) benefits provided in exchange for service rather than as entitlements; (b) policies nurtured by partnerships between government and popularly-rooted voluntary associations; and (c) programs backed by reliable public revenues. The validity of these characteristics may vary among nations, depending on differences among their institutional endowments (Levy & Spiller, 1996) and core values embedded in their social contracts as discussed earlier.

The importance of the discussion here is that factors affecting the political sustainability of a given policy option over time need to be contemplated when designing and selecting a policy option for adoption at a given point in time. Incorporation of the factors enabling sustainability of a policy over time into the analysis of the factors enabling initial adoption of a policy raises the likelihood of adopting a policy option that actually fulfills the desired policy objectives. Of course, the available options remain constrained by the overall set of options supportive of the legitimacy of government itself. In this way, compliance
with all forms of political feasibility constraints described in this section must be achieved simultaneously.

**ECONOMIC VIABILITY AND POLITICAL FEASIBILITY CONSTRAINTS ON TELECOMMUNICATIONS POLICIES**

Sustainable telecommunications policies require the simultaneous fulfillment of the various economic viability and political feasibility constraints described in the prior two sections. This section discusses some of the constraints on deregulatory telecommunications policies.

**Pre-Telecommunications Act of 1996—Historical Perspective**

Given the dual jurisdictional nature of federal–state regulation of the U.S. telecommunications industry, pursuit of deregulatory policies requires coordination between the federal and state governments. Many policy changes to permit competition in telecommunications markets developed under the Communications Act of 1934 and federal antitrust law without the need for further federal legislation. FCC orders permitted entry into interstate long-distance telecommunications and customer premise equipment markets. The Modified Final Judgment (MFJ), settling the Department of Justice’s antitrust case against AT&T, further changed market structure in the long distance, manufacturing, and information services markets. After the divestiture of AT&T, many states amended their laws to accommodate competition in intrastate long-distance telecommunications markets. However, removal of state legal barriers to competition in local exchange markets developed more slowly and unevenly among jurisdictions.

Yet, deregulatory approaches exposed some legal and economic problems that could not be adequately addressed without federal legislation. These problems include the following. First, legal barriers to entry in local exchange markets persisted in many states and could only be uniformly removed through federal preemption. Second, FCC efforts to detariff long-distance services had been held by the U.S. Supreme Court in *MCI v. AT&T* (1994) to be beyond the FCC’s statutory authority under the 1934 Act. Third, competition was eroding the economic viability of artificially imposed implicit subsidies characteristic of traditional monopoly regulation, requiring a shift from primary reliance on implicit subsidies to explicit funding mechanisms and rate rebalancing (Cherry, 1998; Cherry & Wildman, 1999b). Fourth, the waiver process for seeking relief from conditions of the MFJ further fragmented decision-making processes affecting telecommunications regulation, and express coordination of MFJ-related issues, with or by the FCC, required Congressional action.

These problems, among others, induced intense Congressional activity that ultimately culminated in the passage of the Telecommunications Act of 1996 (TA96). As to the problems enumerated, TA96 preempted the states from maintaining or creating entry barriers (Section 253), provided the FCC with forbearance powers to address issues such as detariffing (Section 10), created a framework for universal service policy (Section 254), and codified conditions originating in the MFJ with oversight authority transferred to the
FCC (Sections 271–274). Among other things, it also provided a framework for addressing issues such as interconnection, unbundling, resale, and payphone competition.

**Post-Telecommunications Act of 1996**

Federal and state government actions to implement the provisions of TA96, however, are creating new sustainability problems. Many difficulties are inherent in the statutory provisions of TA96. As stated by the U.S. Supreme Court in *AT&T v. Iowa Utilities Board* (1999): “It would be gross understatement to say that the 1996 Act is not a model of clarity. It is in many important respects a model of ambiguity or indeed even self-contradiction” (p. 738). Two examples are briefly discussed in the following.

**Sustainability of Universal Service Support**

The first example concerns sustainability of the universal service framework established in Section 254 of TA96. Potential sustainability problems embedded in Section 254 and, particularly, in the rules promulgated by the FCC, were foreseen by Cherry (1998) and Cherry and Wildman (1999b). Cherry and Nystrom (2000) and Cherry (2001) also discussed why the universal service framework established in section 254 should be considered an unconstitutional delegation of legislative power by Congress to the FCC.

The long-term viability of the federal universal service support fund created under Section 254 is threatened by a combination of factors, as acknowledged by the FCC in its *Interim Contribution Methodology Order* (2002b). These factors include the overall size of the fund (approximately $5.9 billion in 2001), the statutory requirement that telecommunications providers’ contributions to the fund be based on interstate revenues, and industry developments that are creating a declining assessable interstate revenue base. The long-term viability is also related to the difficulties of implementing rate rebalancing, which thus far has been a less politically feasible option in the United States than in the European Union (Cherry, 2000).

The *Interim Contribution Methodology Order* does provide interim measures in an attempt to maintain viability of universal service support in the near term while long-term reforms are considered. However, the components of a politically feasible policy that could provide long-term viable funding are unclear. Longstanding political resistance to rate rebalancing remains and, although reallocation of federal and state regulatory powers over telecommunications could better enable rate rebalancing options (Cherry, 2000), altering the federal–state balance of powers is fraught with political difficulties as described in the following subsection. Modifying the source of universal service support also faces political resistance. Federal government budget constraints have thus far blocked funding from general tax revenues, which is why sector-based funding was established in section 254 under TA96. However, there does appear to be increasing receptivity for expanding the assessable revenue base for existing sector-based funding to include intrastate revenues.

**Sustainability of Local Competition Through Unbundling**

Another example concerns the sustainability of an unbundling regime as a means of encouraging viable local exchange competition. Several observations are highlighted here.
First, some difficulties arise from differing opinions as to how to design unbundling to better ensure economically viable local exchange competition. Put simply, ILEC’s argue that their financial viability is threatened by policy options imposing greater unbundling obligations and lower prices for unbundled network elements; whereas competitive local exchange carriers (CLECs) argue that their financial viability is threatened by policy options favored by ILECs. Assessing the veracity of the respective assertions of ILECs and CLECs is a difficult task for the regulators.

Second, some difficulties arise from jurisdictional battles between the FCC and the states with regard to the FCC’s attempts to establish unbundling rules under Section 251(c)(3). The first challenge, ultimately decided by the U.S. Supreme Court in AT&T v. Iowa Utilities Board (1999), was brought not only by industry members but by state commissions asserting that the FCC had unlawfully intruded on states’ intrastate regulatory authority. Even though the U.S. Supreme Court upheld the FCC’s jurisdictional authority in AT&T v. Iowa Utilities Board, the Court did invalidate as overbroad the FCC’s application of the impairment standard in Section 251(d)(2) for determining what network elements needed to be unbundled. Upon remand, the FCC’s revised rules were subsequently invalidated by the District Court of Columbia Circuit Court of Appeals in United States Telecom Association v. FCC (2002/2003) (“USTA I”). In relevant part, the D.C. Circuit invalidated the FCC’s national uniform rule for finding impairment as an insufficiently nuanced approach and demanded that the FCC apply a more granular one. Disparate views of appropriate roles for the FCC and state commissions in implementing such a “granular” approach resulted in a contentiously debated and divided decision by the FCC in its Triennial Review Order (2003/2004) and in unprecedented delay in its issuance. Upon appeal, in United States Telecom Association v. FCC (2004) (“USTA II”), the D.C. Circuit yet again reversed and remanded that portion of the Triennial Review Order providing a revised approach for determining impairment. In this case, the D.C. Circuit found that the FCC’s subdelegation of its decision-making authority—not merely a fact-finding function—of impairment determinations to state commissions was unlawful. In essence, the FCC insufficiently considered the states’ perspectives in USTA I, but overdelegated consideration of the states’ perspectives to state commissions in USTA II. Some parties have sought, but the FCC and the Solicitor General of the United States have declined to seek, an appeal of USTA II to the U.S. Supreme Court.

It is unclear whether local competition based on CLEC access to unbundled network elements is sustainable in such an environment. Particularly troublesome is the severity of the continuing delay and legal uncertainty created by federal–state jurisdictionally related battles, which are likely to be prolonged given the allocation of federal and state powers under the U.S. Constitution. Perhaps a more stable political and legal environment could be created through reassessment and realignment of federal and state regulatory powers over telecommunications. However, such realignment would require either Congress to more aggressively exercise its federal preemption powers or a constitutional amendment to override the presumption of powers reserved to the states under the Tenth Amendment. Either option poses daunting political obstacles. The former would invoke opposition based on states’ rights and the latter would require no less than renegotiation of the social contract (U.S. Constitution).
The Unique Legacy of Public Utility Regulation

The sustainability problems associated with universal service funding and unbundling are directly related to specific attributes and implementation of TA96. Yet, there are some political feasibility constraints impeding the adoption of sustainable deregulatory policy objectives that arise from prior policy choices embedded in traditional public utility regulation—the regime from which any deregulatory utility policy is attempting to transition—which long preceded and constrained the provisions deemed acceptable in TA96 itself.

More specifically, Cherry (2003a) discussed how the common law doctrines of just price and businesses affected with a public interest constrain the adoption of sustainable deregulatory models for public utility industries. These common law doctrines are derived from the medieval concepts of fairness in economic exchange and the sovereign’s inherent power to regulate private party activity to protect the general welfare. These concepts form the basis for common carriage obligations—to charge reasonable prices, to serve without discrimination, and to provide service with adequate care—that originated under English common law during the Middle Ages and are a subset of the obligations borne by public utilities (Cherry, 2003a, 2003b). The associated obligations imposed on public utilities in the United States have also been long codified in federal and state statutes regulating the electricity and telecommunications industries.

Attempts to retrench from these common law doctrines to pursue deregulatory policies are politically hazardous. As Cherry (2003a) explains, this is because public utility regulation bears characteristics similar to other forms of welfare state regulation and faces similar political barriers associated with policy retrenchment that affect the sustainability of that policy over time. Furthermore, in attempting to transition from monopoly public utility regulation to a competitive regulatory regime, the conditions for political feasibility often conflict with those for economic viability—for example, political resistance to, but the economic necessity of, rate rebalancing. This conflict exacerbates the difficulty in adopting and maintaining sustainable—that is, reasonably achievable—deregulatory policy objectives. Examples include the electricity deregulatory efforts in California and implementation of section 254 of TA96 by the FCC (Cherry, 2003a). These retrenchment problems necessitate careful reevaluation of the design and efficacy of deregulatory policies.

Possible New Windows of Opportunity for Policy Change

The sustainability problems arising under TA96, and further attempts to retrench from traditional public utility regulation previously discussed, illustrate the difficulties of simultaneously satisfying the political and economic conditions for a financially viable telecommunications industry under deregulatory policies. Under what circumstances can these difficulties be overcome? Kingdon’s model provides some insights.

For adoption of a policy at a given point in time, a window of opportunity must open to enable coupling of the problem stream, policy stream, and political stream. Changes in the problem stream, such as crises or other major focusing events, can create
such windows. There have been several recent events that have increased policymakers' perception of economic viability problems and may provide a window of opportunity for adoption of further regulatory reforms that to date have not been politically feasible.

For example, Cherry (2000) discussed changes in circumstances that could create windows of opportunity to better enable adoption in the United States of rate rebalancing policy more consistent with competitive markets. In addition, the terrorist attacks of September 11, 2001, exposed the vulnerability and importance of telecommunications infrastructure to the nation's economy and security. The economic vulnerability of the telecommunications industry has been further heightened by the dramatic downturn in the telecommunications sector, the rash of CLEC bankruptcies, and the questionable accounting practices and bankruptcy of WorldCom. Finally, recent events affecting other industries may also have spillover effects for the telecommunications industry (Kingdon, 1995, p. 190). These include the electricity crisis arising from deregulatory efforts on behalf of the electricity industry in California and the recent electricity blackout affecting more than 50 million people in the northeast part of the United States.

**INTERRELATIONSHIP OF TELECOMMUNICATIONS AND MASS MEDIA POLICY REGIMES**

The previous section provided examples of the difficulties of simultaneously satisfying economic viability and political feasibility constraints in pursuit of deregulatory telecommunications policies based on problems evolving from within the traditional telecommunications sphere of activities. However, additional difficulties arise from the growing interrelationships between the telecommunications and mass media spheres of activity.

Most notably, with digital convergence, there is a growing tension among policy choices based on common carriage and free speech principles. Historically, telecommunications providers have been regulated as common carriers, and, as providers of transmission facilities only, they possess no First Amendment free speech rights. However, mass media have not been considered common carriers, and, as providers of information content, they do possess free speech rights. With the elimination of technological entry barriers between telecommunications and mass media, policymakers have faced free speech claims from telecommunications carriers and have thus far resisted extension of common carriage obligations to mass media competitors. What constitutes a sustainable balance of free speech rights and common carrier obligations for intermodal competitive providers, such as broadband access providers, has yet to be determined.

**Telecommunications Carriers' Free Speech Rights**

In 1970, the FCC adopted a rule that prohibited any common carrier from providing video programming to subscribers in its telephone area because of concerns that telephone companies would monopolize video programming by favoring their affiliates in granting access to telephone poles and conduits. The telephone-cable cross-ownership ban was codified by Congress in Section 533(b) of the original Cable Communications Policy Act of 1984.
By the early 1990s, the nature of the cable television industry had changed enormously. In the Cable Television Consumer Protection and Competition Act of 1992, Congress found that the cable industry had become highly concentrated, resulting in undue market power that posed barriers to entry for new programmers. Furthermore, cable companies were permitted to provide telephony services over their cable facilities, for which their greater bandwidth provided a competitive advantage over telephone company facilities.

The telephone companies subsequently sought to eliminate the federal telephonercable cross-ownership ban. They succeeded by seeking invalidation of the ban as an unconstitutional violation of their First Amendment free speech rights to provide video programming. Both the Fourth Circuit Court of Appeals in *Chesapeake & Potomac Tel. Co. v United States* (1994/1996) and the Ninth Circuit Court of Appeals in *US West, Inc. v United States* (1995/1996) found the cross-ownership ban to be insufficiently narrowly tailored under the intermediate scrutiny test of the First Amendment. While the Fourth Circuit case was on appeal to the U.S. Supreme Court, Congress repealed the cross-ownership ban in TA96.

Repeal of the federal telephone-cable cross-ownership ban eliminated a form of regulatory asymmetry among competing firms. In this respect, had the video programming ban not been found unconstitutional, the long-run economic viability of individual telephone companies in certain markets could have been seriously threatened (Cherry & Wildman, 2000). In this way, enforcement of telecommunications carriers’ free speech rights has significantly impacted subsequent technological and market developments among the communications industries, as evidenced by substantial entry and merger/acquisition activities of telecommunications carriers into cable and Internet markets.

**Resistance to Extension of Common Carriage Obligations**

New sustainability problems are also being created by the FCC’s policy choices for regulation of broadband services under TA96. These problems are most apparent in recent service classification proceedings considered by the FCC, where the relevant regulatory treatment is driven by a service’s classification as an information or telecommunications service.

First, in the *Cable Modem Access Order* (Federal Communications Commission, 2002a/2003, par. 38), the FCC defined cable modem service to endusers as an information service with no separable telecommunications component under TA96. Thus, provision of cable modem service would not be subject to common carrier regulation. However, the FCC’s ruling was recently reversed by the Ninth Circuit Court of Appeals in *Brand X Internet Services v. FCC* (2003), holding that it was bound by its earlier decision in *AT&T v. City of Portland* (2000) that the transmission element of cable broadband service constitutes telecommunications service under TA96.

Second, prior to the Ninth Circuit’s decision in *Brand X Internet Services V. FCC*, the FCC issued a Notice of Proposed Rule Making (NPRM), *Wireline Broadband Internet Access NPRM* (FCC, 2002c). To avoid imposing asymmetric obligations between cable modem service providers and wireline broadband Internet access providers (i.e., DSL providers) in this NPRM, the FCC tentatively concluded that wireline broadband Internet access service to endusers is also an integrated information service with no separable
telecommunications service (pars. 17–26). However, if the Ninth Circuit’s opinion in Brand X Internet Services v. FCC stands, then the FCC will need to reverse its tentative conclusion—an option it has thus far declined to accept—in order to retain intermodal symmetry.

However, beyond the uncertainty created by the Ninth Circuit’s reversal of the Cable Modem Access Order, examination of the cable modem access and wireline broadband access proceedings reveals a fundamental sustainability problem. By attempting to provide intermodal regulatory parity as non-common carriers between cable modem access and wireline broadband Internet access, the FCC would create intramodal asymmetric regulation between broadband (non-common carriage) and narrowband (common carriage) services over the networks of wireline carriers.

It is not clear whether such intramodal asymmetric regulation is sustainable (Cherry, 2003b). Wireline providers may not be able to provide both non-common carriage broadband and common carriage narrowband on an economically viable basis, at least for some customers, groups, or serving areas. To the extent such economic inviability exists, broadband and/or narrowband services will not be available for some customers, groups, or serving areas. Yet, such unavailability of service will pose political sustainability problems, particularly if the common carriage narrowband service is no longer available. The unavailability of any common carriage-provided service (whether broadband or narrowband) means that the customer is facing a service provider who may choose not to serve an area, refuse to serve a customer, discriminate among customers, or provide unaffordable service (relative to a customer’s needs or means). The absence of any common carriage-provided communications service is likely to be a politically unsustainable scenario, given the unique political feasibility constraints on attempts to retrench from public utility regulation, as previously discussed. Thus, a politically sustainable policy may likely require the availability of some common carriage-provided service. However, joint satisfaction of economic viability and political feasibility may require the provision of all broadband and narrowband services on a common carriage basis in order to ensure that some common carriage-provided service is always ubiquitously available. In other words, the only sustainable policy may be one that simultaneously provides intermodal and intramodal regulatory symmetry.

**Sustainable Balance of Common Carriage Obligations and Free Speech Rights**

Although non-exhaustive, the preceding examples illustrate policy migration across historically separate regulatory regimes. Intermodal competition implicates free speech rights for common carriers and consideration of common carriage obligations for combined facilities–content providers. The classification proceedings for cable modem access and wireline broadband Internet access services present early manifestations of frictions between free speech rights and common carrier obligations as applied to competing communication channel providers. Yet, posing problems of first impression, we understand little concerning the potentially conflicting effects among the legal mechanisms that developed to support free speech rights and common carriage objectives.
FUTURE RESEARCH

At the very least, these issues raise questions as to what set of free speech rights and common carrier obligations for intermodal competitive providers are sustainable—both economically and politically. What are the potential tradeoffs among societal values underlying free speech and common carriage for sustainable provision of intermodal communications services? How might such tradeoffs change over time through technological innovation? Will free speech rights of communication channel providers have to yield to the needs, both economically and politically, of endusers? Or will the centuries-old legacy of common carriage obligations to protect customers have to yield to the free speech rights of communication channel providers? Will sustainable policy require both symmetric intermodal and intramodal service regulation? Does there exist a free speech/common carriage regime that can be stable over time, or will it need to be continually revisited as technological innovation proceeds? These are important, yet only beginning, research questions that telecommunications and mass media scholars need to explore in order to address the evolving interrelationships among the telecommunications and mass media spheres of activity. More broadly, research agendas must continually evolve to embrace new manifestations of policy migration among these historically separate regulatory regimes.

REFERENCES

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