THE PUBLIC'S INTEREST IN TELECOM REFORM:
POST-REFORM PERFORMANCE OF THE MEXICAN TELECOM SECTOR

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
The Degree of Doctor of Philosophy in the Graduate
School of The Ohio State University

By

Lilia Judith Pérez Chavolla, M.A.

* * * * *

The Ohio State University

2002

Dissertation Committee:

Professor Susan Kline, Adviser
Professor Rohan Samarajiva, Co-adviser
Professor Robert Graniere

Approved by

________________________
Adviser

School of Journalism and Communication

________________________
Co-adviser

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ABSTRACT

This dissertation analyzes the public interest discourse that accompanies the implementation of telecommunication institutional reforms in developing countries. Whereas previous research has focused on interpretations of the public interest concept by policymakers, this dissertation addresses the point of view of consumers affected by such reforms. Telecom reforms are often accompanied by official discourse emphasizing benefits in price, quality of service, and access that consumers expect to receive; this dissertation analyzes the extent to which consumers consider that these expectations have been fulfilled. The importance of the consumers' interpretation of the public interest is also emphasized by the increased attention of regulatory agencies and public utility commissions worldwide to consumer protection and education in the new regulatory environment.

The dissertation focuses on the case of Mexico, a country representative of the political, economic, and social challenges faced by nations with low and middle levels of telephone penetration. Using argumentation analysis, the study reconstructs the consumers' public interest argument about telecommunications reform in Mexico, based on a purposive sample of letters to the editor published in the nationally distributed Mexican newspaper *El Financiero* from 1991 to 2001.
The letters were coded to identify three parts of the consumers' argument: industry performance, recurrent themes, and values. Ninety-two percent of the letters were complaints about the service provided by Teléfonos de México (Telmex), the incumbent local exchange operator; quality of service, both equipment-oriented and people-oriented, was the area of performance that consumers complained the most about. Thematically, consumers emphasized different aspects of their relationship with Telmex that made them feel powerless before the operator. In their view, Telmex's power over consumers was increased by its close relationship with the communications ministry. Consumers gave priority to values of interaction, such as respect, politeness, and responsiveness, which Telmex seemed to lack. Three main arguments emerged: (a) Telmex exercised power over consumers; (b) the government failed to fulfill the public's interest by facilitating abuses, and (c) consumers were victims of Telmex. I propose that for consumers in Mexico the public interest in telecommunications means empowering consumers before providers.

Serving the public interest is a fundamental mandate that justifies the existence of regulatory agencies. Based on its findings, this dissertation provides policy recommendations that might enrich the understanding between regulators and the general public and facilitate the realization of the public interest.
To my parents, Maria and Jorge, to whom I owe it all

"Without their suffering, their undying love,
and their beautiful spirit,
I would not be [here] today . . .
my heart singing a song of hope for a better tomorrow.
With the blinking stars above, I became brave.
Fear of leaving vanished, and in my heart a pledge was born.
Their hopes became mine, their lives I would continue to live,
and their dreams, through me,
would become even bigger"

Da Chen
Sounds of the River
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VITA

June 21, 1966 .................. Born - Mexico City, Mexico

1991 .......................... B.A. Communication, Universidad Iberoamericana, Mexico City, Mexico

1995 .......................... M.A. Communication, The Ohio State University, Columbus, Ohio

1995-1997 .................... Graduate Teaching Associate, The Ohio State University, Columbus, Ohio

2000-present ................. Graduate Research Associate, The National Regulatory Research Institute, Columbus, Ohio

PUBLICATIONS


FIELDS OF STUDY

Major Field: Communication
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LIST OF ACRONYMS

AMX    America Móvil's stock
ATM    Asynchronous Transfer Mode
CAGR   Cumulative Average Growth Rate
CCSS-7 Common Channel Signaling System No. 7
CESAC  Center for Monitoring Customer Service
COFECO Comisión Federal de la Competencia [Federal Commission for Competition]
CPP    Calling Party Pays
DTH    Direct-to-Home satellite restricted broadcasting
FCC    Federal Communications Commission
GATS   General Agreement on Trade in Service
GDP    Gross Domestic Product
GFCF   Gross Fixed Capital Formation
GHz    Gigahertz
GPS    Global Positioning System
ICAL   Index for Quality of Basic Telephone Services
ICIRC  Index for Private Lines and Circuits
ICON   Index for Service Continuity
ILEC   Incumbent Local Exchange Company
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<td>INEGI</td>
<td>Instituto Nacional de Estadística, Geografía e Informática, Mexico [National Institute for Statistics, Geography and Informatics]</td>
</tr>
<tr>
<td>ISP</td>
<td>Internet Service Provider</td>
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<td>ITU</td>
<td>International Telecommunications Union</td>
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<td>LMDS</td>
<td>Local Multipoint Distribution Service</td>
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<td>LRIC</td>
<td>Long Run Incremental Cost</td>
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<tr>
<td>MHz</td>
<td>Megahertz</td>
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<tr>
<td>MMDS</td>
<td>Multi-channel Multipoint Distribution Systems</td>
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<td>NAFTA</td>
<td>North American Free Trade Agreement</td>
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<td>NAP</td>
<td>Network Access Points</td>
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<td>NARUC</td>
<td>National Association of Regulatory Utility Commissioners</td>
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<td>NCPI</td>
<td>National Consumer Price Index</td>
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<tr>
<td>NYSE</td>
<td>New York Stock Exchange</td>
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<td>OECD</td>
<td>Organisation for Economic Co-Operation and Development</td>
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<td>ONA</td>
<td>Open Network Architecture</td>
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<td>OSS</td>
<td>Operation Support Services</td>
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<td>PAN</td>
<td>Partido Acción Nacional, Mexico [National Action Party]</td>
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<td>PCS</td>
<td>Personal Communications Service</td>
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<td>PRD</td>
<td>Partido Revolucionario Democrático, Mexico [Revolutionary Democratic Party]</td>
</tr>
<tr>
<td>PRI</td>
<td>Partido Revolucionario Institucional, Mexico [Institutional Revolutionary Party]</td>
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<tr>
<td>PTO</td>
<td>Public Telecommunications Operator</td>
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<tr>
<td>PROFECO</td>
<td>Procuraduría Federal del Consumidor, Mexico [Consumer Protection Agency]</td>
</tr>
<tr>
<td><strong>Abbreviation</strong></td>
<td><strong>Full Form</strong></td>
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<tr>
<td>QoS</td>
<td>Quality of Service</td>
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<td>SBC</td>
<td>Southwestern Bell International Holdings</td>
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<td>SDH</td>
<td>Synchronous Digital Hierarchy</td>
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<td>SECOFI</td>
<td>Secretaría de Comercio y Fomento Industrial, Mexico [Secretariat of Commerce and Industry Promotion]</td>
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<td>SHCP</td>
<td>Secretaría de Hacienda y Crédito Público [Secretariat of Finance]</td>
</tr>
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<td>SCT</td>
<td>Secretaría de Comunicaciones y Transportes, Mexico [Secretariat of Communications and Transport; also Ministry of Communications]</td>
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<tr>
<td>SMD</td>
<td>Servicio Medido Detallado [Detailed Measured Service]</td>
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<tr>
<td>TELMEX</td>
<td>Teléfonos de México</td>
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<td>USTR</td>
<td>United States Trade Representative</td>
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<td>Virtual Private Network</td>
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<td>Weighted Average Cost of Capital</td>
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CHAPTER 1

INTRODUCTION

The process of globalization, which is increasingly linking local events and social movements to others happening in far away places and vice versa, has emphasized the importance of efficient telecommunication networks as basic infrastructure for conducting economic, political, and cultural activities within and between countries (Carnoy, Castells, Cohen & Cardoso, 1993; Castells, 1993; Giddens, 1990). Castells (1996) states that "the world economy was able to become truly global on the basis of the new infrastructure provided by information and communication technologies" (p. 93).

In developing countries, however, the telecommunication networks have chronically faced problems of inefficiency, and the rates of network penetration in most of these countries are only at or below 10 main lines per hundred inhabitants, well below those of their developed counterparts, which have between 40 and 60+ main lines per hundred inhabitants (Melody, 1997, pp.504-506; World Bank, 1994). The problems of low penetration rates and inefficiency are related to and reinforced by institutional practices.¹ Levy and Spiller (1996) point out that vagueness in the regulatory governance of a country and the lack of safeguards for investors against arbitrary
administrative actions negatively influenced the level of private investment in this sector. These factors were compounded by the shortage of expertise in technical and managerial areas, insufficient public capital targeted for investment in the sector, and particularly by the limited reinvestment of revenues caused by the transfer of portions of these funds to other areas of the economy, among other factors.

Under these circumstances and prompted by internal and external pressures for change and the need to participate in the global economy, developing countries are increasingly initiating processes of institutional reform in their telecommunication sectors. Institutional reform consists of a set of transformations in patterns of interaction and activity. In the area of telecommunications these reforms may include changes in one or more of the following three components: (a) regulation,\(^2\) ranging from the revision of existing laws and regulations in telecommunication, trade, and foreign investment, to the establishment of new legislation and regulatory agencies, to partial or complete elimination of some regulations (deregulation); (b) the internal organization of the incumbent telecommunication operator, and (c) the degree of competition in the market (Samarajiva, 2000a). Policymakers in developing countries are implementing these reforms as a means to alleviate institutional failures through the establishment of a more transparent and open environment, which is expected to attract and retain new national and foreign investors to the sector. All these measures are taken with the primary goal in mind of promoting the development of their national telecommunication systems.
Although institutional reform refers to changes in practices, it is also a discursive activity. In his analysis of policy reforms, William Dunn (1993) defines reforms as "symbolically mediated and purposive social processes. . . as a process of reasoned argument and debate" (p.262). He adds that the success of these reforms depends on achieving a sense of "rationally motivated consensus" (p.262) on the desirability of an expected social outcome. One important way in which policymakers can build this consensus is by incorporating public interest language into the discourse of reform, underscoring the potential benefits that it will bring about for society in general and for disadvantaged social groups in particular.

Public interest language helps justify the reforms and also provides legitimacy to the decisions and authority of policymakers and regulators in the eyes of the public. Giandomenico Majone (1996) suggests that the simplest and most effective way for regulatory agencies to achieve legitimacy and transparency is by being more accountable to the public, that is, by giving "reasons for their decisions" (p.292), particularly because these agencies are, by design, isolated from majoritarian decision-making procedures. In an earlier work, Majone (1989) alludes to the public interest as an important policy appeal. He states that "even when a policy is best explained by the actions of groups seeking selfish goals, those who seek to justify the policy must appeal to the public interest and the intellectual merits of the case" (Majone, 1989, p. 2).

Similarly, Samarajiva (2000b) proposes that the success and survival of the increasing number of regulatory agencies being established in developing countries depend in part on effectively communicating to the public and other stakeholders that their decisions and processes are taking the public interest into account. For him,
framing policy decisions in public interest language is essential to earn legitimacy and to counterbalance the problem of regulatory capture (Samarajiva, 2000b). It is important to point out that achieving legitimacy for telecommunication reform and for the industry's regulators is not a one time event. It involves a continuous process of communication between policymakers/regulators, stakeholders (industry representatives, the courts, other government branches, for example), the media, and the general public. The success of the process of legitimation depends on the ability of policymakers and regulators to communicate the openness of the regulatory process, the expertise of their staff, and the public interest standards behind their decisions, while at the same time being attentive to the responses that stakeholders, the media, and the general public send back to them. In this sense, the process of legitimation can be interpreted as a dialogue between policymakers and their audiences.

The purpose of this dissertation is to begin the analysis of this dialogical process, by focusing on the normative content and public interest standards used by consumers to justify the process and evaluate the effects of institutional reform in telecommunication systems. My particular interest in this dissertation is to identify the argumentative structure and the types of values that are explicitly or implicitly being put forward when members of the public claim that a particular decision or action taken by policymakers and/or service providers in the telecom industry is or is not in the "public interest." The analysis of the consumers' normative discourse about the public interest clarifies the value structure and value hierarchy in their discourse, and reveals that,
although the areas of performance that consumers expressed concerns about changed over time during the period of analysis, the value structure and hierarchy of consumers in Mexico remained relatively constant.

The diachronic analysis of the constructions of public interest fills two gaps identified in the literature. First, by including the voice of the public in the analysis of the discourse of policy planning and evaluation, this dissertation tries to balance the literature's bias in favor of examining the use of discourse and argumentation only by policymakers. Second, by looking at the constructions of public interest through time it is possible to provide a more in depth analysis of continuities and discontinuities in the usage of this concept, overcoming the limitations of synchronic analyses.

Rationale

The view of policy making as a discursive practice has been developed by scholars in political science, policy analysis, and policy planning as a reaction to what they considered limitations of a positivistic approach to policy. This body of literature, commonly known as the "Argumentative Turn" in policymaking, developed during the past two decades, provides a rationale for the analysis of public interest language in telecom institutional reform for three reasons. First, as stated above, it emphasizes the discursive and interactional facets of policy; second, it acknowledges the implicit or explicit presence of normative considerations in the arguments put forward to support or refute a particular policy decision; and finally, the interest of this literature in developing a more democratic approach to policymaking coincides with this dissertation's interest in including the voice of the public in the analysis of
telecommunications policy. However, the interest of the argumentative turn in developing a more democratic process of policy planning and evaluation tends not to be reflected in the researchers' own analyses of policy argumentation, which, with a few exceptions (e.g., Throgmorton, 1996), give prevalence to the discourse of policymakers and members of regulated industries and tend to ignore the public's perspective. In the following sections I address each of these three insights and discuss their applications to the analysis of public interest language in telecom reform.

Policy as a discursive and interactional practice

In his introduction to Evidence, Argument and Persuasion in the Policy Process (1989), Giandomenico Majone underscores the importance of discourse in policy as he states that

as politicians know too well but social scientists too often forget, public policy is made of language. Whether in written or oral form, argument is central in all stages of the policy process [italics added]. . . . Political parties, the electorate, the legislature, the executive, the courts, the media, interest groups, and independent experts all engage in a continuous process of debate and reciprocal persuasion. (p. 1)

The statement above, supported by other scholars within the argumentative turn body of literature (Agar, 1983; Dryzek, 1993; Fischer, 1993; Throgmorton, 1993, 1996, among others), points out two important assumptions which this dissertation builds on. The first assumption is that argumentation is an intrinsic part of policy, and the second is that the interest in persuading audiences through arguments is not limited to planners and policy analysts, but includes the media and members of society, either represented through interest groups or as members of the electorate. The former assumption is
important because it emphasizes the role of communication practices in policy, about which the application of Communication theories and qualitative methods may provide valuable insights. The latter assumption is also important for this dissertation because it acknowledges that members of the general public are not simply passive receptors of political messages, but are active participants in the policy process, having a voice and particular interests, even when their opinions are not necessarily organized or in unanimous agreement, or when their interests are not necessarily reflected in policy decisions.

The introduction of argumentation processes as intrinsic to policy is a reaction of scholars in the argumentative turn to the separation of facts from values, of empirical knowledge from normative considerations, characteristic of the modernist or positivistic view of science and policy. Supporters of the argumentative turn (Dryzek, 1993; Healey, 1993; Maynard-Moody & Stull, 1987) consider this separation to be the result of the priority of scientific rationalism in positivism. Rationalism postulates the objectivity and neutrality of knowledge claims obtained through logical objective methods, such as surveys, computer modeling and forecasting (Throgmorton, 1993). Because of the assumed objectivity of the methods used, the outcomes or facts obtained through them are also considered value-free and objective. In this context, values and ethics are considered "peripheral, unnecessary, or undesirable" (Dunn, 1983, p. 2), a position denounced by the argumentative turn in policymaking, which in contrast proposes to study policy as a process including both political-rhetorical and technical-scientific facets (Throgmorton, 1996).
Thus, without completely renouncing rationalism, scholars in the argumentative turn challenged the objectivity of the positivist approach to policy by directing attention to the process of construction and negotiation of meaning in policy, as well as to the persuasive intent of the arguments used by policymakers and other actors in the policy process. Discourse, including scientific, mathematical, and technical instruments, is considered a "tool" that can be used strategically to convey and support a point of view (Throgmorton, 1993, 1996). Moreover, this body of literature, rather than leaving policy language unquestioned, makes it an object of inquiry by questioning both the way policy problems are framed, and the particular organization of priorities and alternative solutions in addressing policy issues, that is, what is emphasized or de-emphasized in talking about an issue, as well as by making explicit the implicit values supporting those frames and organizations. As Fischer and Forester (1993) affirm if analysts' ways of representing reality are necessarily selective, they seem as necessarily bound up with relations of power, agenda setting, inclusion and exclusion, selective attention, and neglect. If analysts' ways of representing policy and planning issues must make assumptions about causality and responsibility, about legitimacy and authority, and about interests, needs, values, preferences, and obligation, then the language of policy and planning analyses not only depicts but also constructs the issues at hand [italics added]. (p. 1)

In studying this constructive characteristic of policy and planning analyses, scholars of the argumentative turn have paid particular attention to the way in which the interpretation of meaning affects and is affected by the frames, arguments, and rhetorical tropes used by planners and other policy actors when presenting their arguments to particular audiences in particular contexts. For instance, Throgmorton (1993, 1996) considers that planning is "persuasive and constitutive storytelling" (1996,
p. xiv) and policy planners are both storytellers and characters in the stories told by others. The purpose of the stories planners create is to increase acceptance of a particular view or action, as well as to incite others into action. The proposal I put forward in this dissertation is that consumers, in using voice to express their opinions about policy measures and industry performance, have the same persuasive intent in mind as policy planners.

Throgmorton (1993) states that to achieve the planner's intentions, their narratives need to shape "reader's attention and expectations rhetorically" (p. 53). Similarly, Forester (1983) directs attention to the role of policy analysts as organizers of attention. He argues that an analyst should be considered no longer as a rationalistic problem solver but as a pragmatic critic--not shaping facts alone but more profoundly shaping attention; influencing what people learn about, and how and when they do--not calculating (means to ends, or error signals) but organizing attention to possibilities (organization attention, engagement, and action for practical political purposes and organizational ends) (p. 51). Thus, by shaping attention to particular issues it is expected that analysts will also influence the way audiences interpret these issues.

How a particular issue is shaped depends, according to Rein & Schön (1993), on the frames of reference employed by planners and analysts. A frame is a perspective consisting of facts, values, theories, beliefs, and perceptions through which people make sense of reality and on which their interpretations of situations and evaluations of actions are based (Rein & Schön, 1993). These authors consider that the analysis of the
frames of reference used in planning is important because the selection of a particular frame influences the definition of a problem, the salience of certain topics and values over others, and the type of solutions offered.

This literature, thus, considers persuasion to be "constitutive" (Throgmorton, 1993, p. 119), as it is used in shaping problematic issues in particular ways, so that by integrating a particular policy utterance to larger social narratives, and by appealing to systems of values and preferences, particular audiences will increase their acceptance of the preferability of a proposed action or explanation. Majone (1989) states that it is this intertwining of facts, values, and beliefs in policymaking that makes persuasion an indispensable tool for policy. Arguments bridge the gap between facts and information and the subjective conclusions or evaluations derived from them. He argues that "factual arguments, unaided by persuasion seldom play a significant role in public debate" (Majone, 1989, p. 8). Majone's claim that arguments are used as links between facts and values is supported by the findings of this dissertation.

Majone points out that persuasion plays an even more important role in policy planning and analysis during processes of policy deliberation and evaluation, particularly when there is inconclusive evidence to support arguments, when the optimal solution to a problem is controversial or unfeasible, and when different evaluative criteria can be used in deciding what a good policy is and what can be considered good outcomes. This latter point is particularly consonant with the purpose of this dissertation, as it intends to shed light on the criteria used by consumers when deciding what type of actions or outcomes are considered to serve the public interest in
implementing telecom reform. The analysis of the structure and content of the arguments made by consumers intends to make explicit the implicit connections that consumers make between values and facts.

In the analysis of policy argumentation, the literature describes the process of persuasion and argumentation not as a one time event, but as a continuous process of communication between policy actors, in which negotiation of meanings take place over time (Hoppe, 1993; Sederberg, 1984; Throglmorton, 1996). The argumentative interaction of policy actors is seen as a "flow of utterances, replies, and counterreplies (i.e. a narrative)" (Throglmorton, 1993, p. 120) that creates the context for future utterances and interactions. Hoppe (1993) describes this cyclical quality of the interaction and thus, of the process of negotiation of meaning in policymaking, as a never-ending series of communications and strategic moves by which various policy actors in loosely coupled forums of public deliberation construct intersubjective meanings. These meanings are continually translated into collective projects, plans, actions, and artifacts, which become the issues in the next cycle of political judgment and meaning constructions, and so on. (p. 77)

It is important to point out that the interpretation of intersubjective meaning by different actors is not uniform, and tends to result in diverse and, on occasion, conflicting readings of the same project, action, or even the same word (Throglmorton, 1996). In his analysis of the case of Chicago's electric industry, for example, Throglmorton (1996) looked at the narratives of consumer groups, the electric utility, and policy planners through time, and discovered that even when these actors shared a modernist view of planning as a rational system, their stories differed in the type of plots used and in the role played by different actors. Throglmorton (1996) points out
that even apparently non-conflicting words, such as "city," "city's plan," and "takeover," can have different meanings and uses for different actors. For instance, in the Chicago case, the word "city" was used by consumers as a metaphor of themselves, while the electric utility used it as a synecdoche (a rhetoric trope in which a part is used to represent the whole) to represent the municipal legislative body of Chicago. He states in this respect that "there can be no neutral words about contested issues" (Throgmorton, 1993, p. 135).

Similar to Throgmorton, Maynard-Moody and Stull's (1987) research on actors' interpretations of industrial reorganizations finds that the context surrounding different actors affects their interpretations of the meaning of particular words. They state:

In reorganizations, as with all policy changes, finding that different groups attach different meanings to the same concept underscores the importance of examining first-order interpretations. There are no universal definitions of "merit," "efficiency," "fairness," or whatever the guiding values of a particular policy. Each must be understood in context [italics added]. (Maynard-Moody & Stull, 1987, p. 258)

In the case of the concept of public interest, the lack of a universal definition is perhaps even more evident than with the concepts of "efficiency" and "fairness." As is discussed in the following chapter, one point about which the literature on public interest seems to agree is the vagueness of the concept of public interest and the differing interpretations of it. Some common definitions, such as "commonly held value," a "superior interest," "process," and "balance of interests" give an idea of the wide range of concepts used in defining public interest (Held, 1970; Ramberg, 1986; Schubert, 1957). Yet it is this vagueness that gives the concept the flexibility to be
adapted to changing economic and technological conditions (Krasnow & Goodman, 1998). As stated above, it also makes this concept a valuable tool for legitimation of policy decisions (Majone, 1996; Samarajiva, 2000b).

Along the lines that Maynard-Mody and Stull (1987) propose, this dissertation examines the first-order interpretations of an articulate subset of the Mexican public that actively participate in the debate about the public interest in telecommunication in Mexico. In contrast to Throgmorton's and Maynard-Mody and Stull's studies, this analysis focuses on the concerns expressed by individuals, rather than organized groups with collective demands. The analysis of public interest language in the Mexican telecom reform looks at the persuasive character of argument by identifying the values that individual consumers intertwine with facts as they evaluate the outcomes of institutional reform.

In sum, by challenging the limitations imposed by positivism/modernism on policy analysis and planning, the argumentative turn opened the door to the analysis of the role of values and persuasion in policymaking. The argumentative turn considers policy analysis and its tools (surveys, forecasts, et cetera) no longer as rational and value-free, but as parts of a constructive, reiterative, and persuasive process in which different members of society are involved, although not with identical levels of power and access. Policy actors, particularly policy planners and analysts, are seen as shaping policy problems and their solutions, blending values and facts in their efforts to convince particular audiences of the preferability of their points of view. Finally, communication processes of persuasion and negotiation of meaning are seen as intrinsic to policymaking.
Values in policy argumentation

As stated above, one of the important contributions of the argumentative turn is the incorporation of values into the analysis of policy. The vast literature on values defines them as abstract qualities, guiding principles or beliefs used as standards or criteria for selecting, justifying, and evaluating actions and their outcomes (Feather, 1992; Rokeach, 1973; Schwartz, 1992, 1994; Schwartz & Bilsky, 1987, 1990). This definition underscores three of their fundamental characteristics: (a) values are abstract, which makes them applicable through time and space and gives them endurance and relative stability; (b) they refer to prescriptive or proscriptive beliefs or qualities, that is, an individual or society prefers some means and outcomes to their opposites because they are considered to be desirable (Rokeach, 1973); and (c) they are used as standards to guide conduct, choose between alternatives, and make decisions. According to Rokeach (1973), values are employed to guide the presentation of self to others, to take positions on different issues, to compare, evaluate, and judge oneself and others, as well as to persuade others on what type of actions are to be preferred.

The need for attention to normative judgements in policymaking is particularly emphasized by John Dryzek (1993). He points out that the achievement of consensus as a democratic goal can conceal the unequal conditions in which it is achieved; a matter that he considers has not properly been dealt with by the argumentative turn literature. Dryzek argues that commonly accepted standards or value systems in which consensus is based "may embody unexamined normative constraints that systematically favor particular interests" (1993, p. 227). From Dunn's (1993) perspective, the argumentative analysis of claims made by different stakeholders helps uncover unexamined
assumptions and standards of evaluation behind them. Argumentation is for him a tool for making the implicit explicit, and as such it facilitates the critical examination and better understanding of reasoning guiding policy reform and of the manner in which stakeholders interpret and in some cases, distort knowledge.

In this dissertation, argumentation analysis facilitates making explicit the values behind the evaluations of performance made by the public and helps illuminate the expectations and assumptions that support the argumentative structure of the consumers' public interest argumentation.

Towards a democratic approach in policymaking

The third common interest of the argumentative turn literature is its concern about developing a more democratic approach to policy analysis and planning. Frank Fischer (1993) expounds the emergence of the argumentative turn as a result of the increasing participation of social scientists and technocratic experts from outside government in the process of problem definition, agenda-setting, and the proposition of alternative policies. Fischer argues that the participation of experts in these fundamental steps of the policy process has made policymaking increasingly independent and divorced from the pressures of interest groups, party debates, and particularly from public opinion.

For Fischer, intellectual and political elites have created policy "discourse coalitions" (p. 34) that have made "normative arguments and empirical evidence . . . unavoidable components of modern policy struggles . . . [t]his is reflected everywhere today in the increasingly technical--and quasi-technical--nature of policy
argumentation" (p.35). In his criticism of modernism, Fischer (1993) adds that the use of technocratic discourse in policy argumentation and the complexity of social problems have validated the need of expert policy advocates and have contributed to keeping the public from participating in policy debates (Fischer, 1993; see also Dryzek, 1993; Goldstein, 1984).

Forester (1983) also directs attention to the structures of power and the "nonaccidental distortions" (p. 53) in communication created by the use of technical jargon, the lack of access of disadvantaged groups to the policy process, and the reliance on expertise. He believes that in order to correct such distortions and promote democratic participation and better understanding of the "poor, the unorganized, and the powerless" (p.54) it is necessary for planners to recognize the existent inequalities in power and in access to information, as well as the moral dependency of citizens on the information provided by planners.

Behind the over-valuation of expertise and the use of jargon is perhaps an even more important barrier to the development of a democratic policymaking process: the devaluation of the public's knowledge by planners and policy analysts. In his study of Chicago's electric utility, Throgmorton (1996) points out that the utility and the regulatory commissioners tended to consider the contrary rhetoric of community groups as "merely incoherent babblings of self-interested meddlers or the undisciplined ramblings of people who do not have the expertise necessary" (p. 252). Thus, the possibilities for dialogue between policymakers and the public are reduced in two ways, first, by the use of specialized language and second, by considering that the public has little to contribute to the political dialogue.
The problem of devaluation of the public's knowledge and opinion is especially important in the case of public interest language. It can be argued that deciding what kind of policies better serve the public interest should not be done unilaterally; rather, it is necessary for policymakers to address the public in its own terms and to acknowledge public opinions and the values behind them. This can only aid regulatory agencies in legitimating their decisions in the eyes of the public. Throgmorton (1996) considers consumers and community groups important voices with their own point of view. He states that their "rhetorics and stories (which reflect the ways people speak...) [interplay] in rich and often confusing complexity" (p. 252). Yet few authors within the argumentative tradition have actually looked at the rhetoric of the public itself, and constrain their analyses to considerations of the view of policymakers.

This absence of consideration of the public is even more salient in the literature referring to telecommunications reform, as is discussed in the following chapter. In this sense, this dissertation intends to address this gap in the literature, analyzing the voice of the public, departing from the voice of individual consumers, in order to identify the values and expectations behind them. The final objective is to better understand the conditions that hinder and promote the realization of their conceptualization of the public interest and their participation in the negotiation of the meaning of public interest in Mexico. Ultimately, the desire guiding this dissertation is to make the policy process more democratic. Along these lines, Fischer (1993), like Forester, considers that the analysis of policy arguments and discourse, by emphasizing the constructivistic nature of knowledge and the possibilities of dialogue through argumentation, can contribute in "bring[ing] the citizen back into the policy-making process" (1993, p. 36).
Definition of key terms

Public interest

The definition of public interest employed in this dissertation is unusual. Traditionally, public interest theories have defined this concept in terms of the premise "'x' is in the interest of 'A'", where 'A', the public, represents an individual or an aggregate of individuals that has an interest or stake in the realization of some state of affairs or outcome 'x'. This state of affairs or outcome is usually considered a positive virtue that would benefit 'A' or protect 'A' from harm. In this sense, 'x' is considered to promote the "common well-being," bringing a person or a community to a condition of well-being (Oxford English Dictionary Online, 1989).

In keeping with this traditional approach, Richard Flatham (1966) defines the public interest as a "normative standard" which the decisions and actions of the government as a public agent are measured against. Flatham points out that as a standard, the public interest has both commendatory and descriptive force. It is commendatory because it is commonly employed to approve or commend public policy, to state that a particular policy is "good for society" or will increase its welfare. As such, the commendatory force of the term remains constant, even when applied to different issues. The descriptive force of public interest, that is, the justifications or standards provided to support the claim that a particular public policy is "good," and to evaluate its outcomes, however, changes from case to case. The justification of government actions and policies motivates compliance in the face of conflict and diversity of interests.
The definition of public interest used in this dissertation, proposed by Christopher Quinn (1980), takes a different stand with respect to the public interest. Like Flatham, Quinn considers the public interest to be both normative and descriptive, in the sense that the interests pursued are considered to be good for a particular group and that the evidence, justifications, and standards used to support such interest claims may vary. Yet Quinn departs from tradition in his definition of the public. Quinn uses the same premise "'x' is in the interest of 'A'" as the traditional approach, but he does not define 'x' as a state or outcome that changes based on the interests of 'A'. Instead, Quinn considers that the public interest is the interest of an aggregate 'A' (which can be composed of a single individual or an aggregate or individuals) in the realization of the public itself. In his definition, 'x' is the public, which he defines as the conditions of rational discourse. In this sense, Quinn argues, "'public interest' is 'interest in the public,' 'interest in the conditions of rational discourse'" (1980, p.323).

I find Quinn's definition particularly appropriate to this dissertation because by equating the public with the conditions of rational discourse he emphasizes that the meaning of the public in a particular temporal-spatial context is always discursive and negotiated. As such, the particular shape of the public depends on the interests of those who are allowed to participate in the negotiation of its meaning. In this sense, Quinn's definition of the public as the conditions of rational discourse underscores the need to ensure the realization of the common interest, that is, of the conditions that allow the participation of different types of aggregates in the negotiation of meaning. It is through their participation in this negotiation that men fulfill their role as rational agents.
Quinn's definition of the public is based on two elements of the human condition: the facts that man is rational and that he is social, that is, man exists within a social context in which he becomes socialized and which influences his understanding of the world. But at the same time, his rationality implies that he has a "critical perspective upon society" (Quinn, 1980, p. 344). According to Quinn, "insofar as man is social and man is rational, there is a preeminent interest [of man] in the public" (p. 348).

Quinn points out that for humans to be rational actors and participate in society it is necessary that they engage in rational discourse. For its part, rational discourse, as the object of the principle of public interest, requires the realization of five necessary and jointly sufficient conditions:

(a) Condition of rationality, meaning the capacity to reason, that is, to make inferences, apply definitions, and assess evidence.

(b) Condition of linguistic competence, that is, having a common language or mode of communication that would allow the different parties involved in a discussion to request clarifications and engage in argumentation.

(c) Condition of possession of knowledge. For a rational discussion to take place it is necessary that at least one of the participants has substantive knowledge about the topic of discussion.

(d) Conditions of mutual comprehension of judgmental standards. For two parties to engage in an argument and have the possibility of reaching an agreement it is necessary that both parties understand the standards of judgment that are being used by the other party as backing for his arguments.
Having a common set of standards does not mean that both parties agree with them, just that they understand that such standards are being employed. The standards are negotiated, not absolute. Value systems are an intrinsic component of man's judgmental standards.

(e) Condition of access. For Quinn, public discourse only occurs when a rational agent is able to participate in positing his interest claims in a public forum where these claims can be examined by others and contribute to public discourse.

Jointly, these conditions allow the realization of the public as rational discourse. Quinn, however, does not stop there. Since he considers the public interest a normative principle, he argues that in order for the conditions of rational discourse to be realized it is necessary that a set of preconditions exist in society. These preconditions are composed of a set of values, norms, and institutions that Quinn considers necessary for the conditions of rational discourse to be realized. The values that Quinn considers preeminent for a realization of public are humility and respect. Man being social and rational realizes the limits of his own abilities and his need to interact with others to improve his understanding of the world. This humility encourages man to interact with others and to regard them with empathy and as worthy of respect.

Closely linked to these values are four norms that, in Quinn's view, realize the public. These norms are: (a) patience, which implies dedicating time and attention to others while they are expressing their interest claims; (b) truth-telling, which emphasizes man's obligation to respect others by telling them the truth when interacting with them; (c) tolerance, which requires awareness that other rational agents have also
the right to action; and (d) respect for authority, which means acceptance that man is "obligated as a rational agent to seek and accept the authority's advice" (p. 359). Quinn defines authority broadly, "as someone who is believed to possess a greater understanding of some facet of the world than most other individuals" (p. 359) and points out that it is the recognition of such ability on the part of the authority and of the limitations of others that engenders respect. Quinn emphasizes, however, that respect for authority is a reciprocal norm that obligates the authority to respond in kind by being patient and truthful with the public. Finally, with respect to the institutions in which the public is realized, Quinn emphasizes the role of the state, which he points out "must serve to embody the public if the public interest is to be realized within [a given] society" (p. 361).

Since the goal of this dissertation is precisely to examine how public interest is being defined by members of the public through time, Quinn's approach seems appropriate, as it emphasizes the role of values and standards in constructing public interest and he conceives its construction as a process of rational argumentation and evaluation. In this sense, Quinn's approach to the public interest concept provides an ideal model of the values and norms that facilitate the realization of the public interest. The analysis of consumers' values in Chapter 6 and the reconstruction of the consumers' public interest argument in Chapter 7 use this ideal model as a guideline for the analysis of the consumers' public interest argument. Perhaps as a reflection of human nature and of the basic values emphasized by Quinn, this study found that the public interest argument of consumers in Mexico does reflect Quinn's proposed values and norms.
Even though Quinn's approach to the public interest concept is innovative, it is also compatible with other definitions of public interest in which the normative character of the term is emphasized. Among some of these definitions commonly used in the literature, Bennet Ramberg (1986) points out "commonly held value," "moral imperative," "balance of interests," "superior interest," "government acting in accord with the values of all the people," and "idealist objective" (p.13). Most of these definitions coincide in pointing out the role of this concept as a process in which the concerns and needs of all involved need to be addressed and balanced against each other, a concept that embodies an important goal of this dissertation. As Nicholas Johnson (1979) states,

"The public interest" is, after all, a process, not a policy. It is a process of decision-making that gives equal consideration to the needs and the views of all citizens, the weak as well as the powerful, the silent as well as the noisy, those uninformed the decision is even being made as well as those actively participating in the process. (p. 2)

Public interest and consumer interest

According to Quinn, in the expression "x is in A's interest", 'A' refers to those who have an interest in the public and, as such, 'A' may be composed of any kind of aggregate because "only an aggregate of individuals can embody the conditions of rational discourse" (p.375). As a form of aggregate, consumers can be considered able to embody such conditions and their interest claims (needs, values, and preferences) are those of members of society that have access to a service, in this case, telephony. As an aggregate of individuals, the consumers' interest claims about what is preferable might reflect to some point the preferences of the particular society to which they belong.
There may be some cases in which the interests expressed by telecommunications consumers do not necessarily represent the preferences of other members of the public that do not have access to telephone services. This may be the case in countries like Mexico, where the number of persons with access to service is relatively low compared to the whole population, particularly when considering the number of consumers with telephone connection to their houses. Despite this limitation, it is important to consider that as rational agents, different members of the public may share a commonality of experiences and opinions, regardless of their differences with respect to access to service. In this sense, consumer interest can be considered a gateway to a better understanding of the conditions that members of the public in Mexico may consider necessary for the realization of the public interest in the telecommunications sector.

**Values**

Although values are individually held, the organization of an individual's *value system*, that is, the relative order of importance in which values are organized, is the combined result of a process of socialization and personal experience. Values are culturally shared criteria for evaluation and action. Social institutions play an important role in their acquisition and transmission as absolute criteria to be followed; in this sense, socialization facilitates the endurance of a particular set of social values. However, even when values tend to be relatively stable social products, they change over time as a response to social and individual changes. The need to apply absolute
values in particular circumstances requires the individual to compare and prioritize values establishing a hierarchical order (Feather, 1992; Schwartz, 1994).

Van Dijk (1998) points out that there are different dimensions of values, from those related to positive properties of particular individuals at the level mind, body, character, and action, to those related to the interaction between individuals and more complex social structures, including whole societies. Although each of these dimensions have some values that apply only at their particular level, van Dijk points out that some fundamental values, such as good and bad, can be applied across dimensions. The identification of different dimensions of values proposed by van Dijk is particularly useful for this dissertation because the documents it analyzes are texts written by consumers in which they evaluate actions and conduct that occur at different dimensions of values proposed by van Dijk, particularly those of action and interaction, as is discussed in Chapter 6.

One of the objectives of this dissertation is making the values included in the consumers' argument about the public interest explicit, so as to better understand the connections between values and facts that consumers made. In this sense, van Dijk's classification of values is useful because it focuses on the type of values used to evaluate desirable and undesirable modes of conduct not only at the personal level, but covering a wide range of situations, from the intrapersonal to the interactional level, to the level of society.³
**Research Question**

The dissertation intends to respond to the following research question:

1. How have members of the public constructed the meaning of the public interest in their opinions of the policies and outcomes of telecom institutional reform?

In answering this question, the research will address the following objectives:

a. Identify the argumentative structure of the consumers' construction of public interest,

b. Identify the values being expressed and prioritized by consumers in their constructions of the public interest, and

c. Identify changes in the argumentative structure of consumers over time.

**Research Method**

The dissertation employs an intensive research design approach focusing on the analysis of a case study. The analysis of a single case study was considered the best design to address the research questions stated above because it facilitates a more in-depth study of the contextual factors influencing the construction of arguments and their inherent values. In particular, the case study approach facilitated making connections between the regulatory reforms, their effects on actual performance of the telecommunications system in Mexico, and the perception that consumers had of such performance. Nevertheless, it is important to point out that the intensive nature of the
case study, as well as the specific characteristics of the newspaper source and of the population from which the data for this analysis was drawn limits the possibilities of generalizing the findings of this dissertation to other populations.

Using argumentation analysis, the constructions of public interest made by consumers in Mexico are analyzed by examining letters to the editor published in a national newspaper, in which they express their opinions and evaluate the process of telecommunications institutional reform. The period of analysis starts in 1991, after the privatization of the incumbent telecommunications operator Teléfonos de Mexico, which initiated the reform process in the sector, and ends in March of 2001.

Significance

Once the process of institutional reform has been initiated, policymakers need to focus on the factors that will help both consolidate the changes and benefits obtained and ensure their continuation. As stated above, for regulatory agencies, achieving legitimation means among other factors, justifying their decisions in terms of how they serve the public interest. Serving the public interest requires regulators and other policymakers to pay attention to the symbolic environment that surrounds them, that is, to the interests, values, and concerns voiced by different constituents, interested parties, and government actors. One of these voices is that of ordinary members of the public as it gets expressed through the media. This dissertation proposes that examining what consumers, as members of the public, express in the media about their perception of the public interest can help regulators and policymakers better understand the needs of the public with respect to telecommunication services.
The analysis of argumentative structures around public interest also brings to the light implicit claims and values in the discourse of consumers. Along these lines, Fischer and Forester (1993) point out that "in some cases, what [policy] analyses do not say matters more than what they do say" (p. 6). Making the implicit values of consumers explicit may improve the understanding that policymakers have of their position and of the standards applied to their actions. A better understanding of the expressed public interest goals of consumers would be a first step in the path towards a more informed picture of the differences between the perspective of policymakers, the industry, and consumers that may hinder mutual understanding, the achievement of public support, and the possibilities for dialogue.

The identification of consumers' expectations of performance and of the type of standards they apply in evaluating performance can help illuminate areas of telecommunications performance, particularly of quality of service, that are of great concern to consumers but that regulators and policymakers have failed to explicitly address in their decisions. Addressing these issues would not only make the process of reform more responsive to consumer needs, but would also strengthen the legitimacy of the regulator as advancing the public interest.

The analysis of public interest constructions made by the public can also be helpful in the development of subjective performance criteria for the telecommunications sector. Performance in telecommunications is for the most part evaluated through objective criteria based on technical and financial indicators. Yet there is an interest among international organizations and telecommunications regulators, such as the British OFTEL, to develop a set of criteria that incorporates the
view of consumers. The argumentative analysis of public interest facilitates the identification of areas of concern and of criteria used by consumers when evaluating the performance of telecommunications providers that can be later operationalized into more universal criteria for evaluation.

**Delimitation of the subject of study**

The proposed analysis of the constructions of public interest made by the public recognizes that these constructions are affected by and affect the particular socio-historical context and social institutions in which they are developed. The analysis of this interrelation is necessary in order to reveal causal relationships between these factors. Yet this dissertation does not intend to address causal relationships nor to explore in depth possible reasons behind changes in the value structure of the public. In order to do this type of analysis it is necessary first to develop a better understanding of the content of policy constructions. This dissertation is a first step in this direction.

**Outline of Chapters**

Chapter 2 presents an overview of the literature on telecommunications reform and its approaches to the concept of public interest. In Chapter 3, the method of Argumentative analysis is introduced, describing the data sources and the analytical procedure to be used. Chapters 4 and 5 provide the background for the case study on Mexico that serves as a context for the argumentative analysis of consumers' letters. Chapter 4 describes the process of telecommunication institutional reform in Mexico, while Chapter 5 analyzes the results of the reform process in five criteria of
performance. Chapter 6 includes the findings from the codification of consumers' letters for performance, themes, and values, pointing out major trends and changes in the consumers' claims and values over time. Finally, Chapter 7 answers the research question by presenting the consumers' public interest argument; provides policy recommendations based on the dissertation findings; points out limitations of this study and provides suggestions to address such limitations in future research.
Endnotes

1 Institutional practices refer to standardized or sedimented patterns of behavior (activity and interaction) that are basic elements of the processes of production and reproduction of social systems (Giddens, 1979).

2 These reforms are made with the purpose of improving the effectiveness of the regulatory framework in terms of clarity, cost-effectiveness, and performance (OECD, 1999a, p. 17).

3 In contrast, other scholars organize values according to their similarity in goals (value types) and to the relationship of compatibility or opposition between them (value structure). For instance, based on his research on human values, Rokeach distinguishes values based in their functionality. His classification identifies two types of values: (a) instrumental values which are beliefs that refer to desirable means or "idealized modes of conduct" to achieve outcomes, and (b) terminal values to desirable "idealized end-states of existence" (p. 12). Both terminal and instrumental values can be oriented towards society (interpersonal) or towards the individual person (self-centered or intrapersonal). So, for example, competence or self-actualization values are instrumental values focused on the person, and can be described as desirable personal characteristics, such as being capable, broadminded, ambitious, and clean, among others; while moral values refer to instrumental values focused on society, including being honest and responsible. Rokeach's classification of values is valuable, but insufficient for the purposes of this dissertation as it perceives values as existing only on two dimensions, personal and social. This limited view would force the researcher into a more constrained and less specific classification from which to identify the connections made by consumers in their letters about performance in the telecommunications industry in Mexico.
Telecommunications policy and the public interest

Like a wild card, the language of public interest seems to adapt to the values assigned to it by the party using it as the game between market forces and regulation goes on in the telecommunications playing field. The flexibility of the concept has been widely recognized in the literature, either as a criticism or as praise. In this chapter, I review some of the approaches taken in the telecommunications policy literature with respect to the concept of public interest, particularly as it relates to its usage in telecommunications reform. Virtually all of the research addressing issues of public interest in telecommunications reform fits into the political economy approach, because that approach looks at the interaction of political, economic, technological, and discursive factors and at their impact on the outcomes of telecommunication reform. Scholars using this approach can be differentiated into three different perspectives based on the following three types of factors that are given prevalence in their analyses: (a) political-technological, (b) economic, and (c) historical-discursive.
Within these three perspectives, this body of literature examines constructions of public interest, emphasizing either a positivistic or a normative viewpoint. Scholars taking a primarily positivistic point of view describe how the concept of public interest is defined by different actors at some point in time or how the use of the concept has changed over time, but stop short of stating a particular position on what the concept should mean. Others adopt a more normative point of view, stating not only how the concept has changed over time in particular contexts, but also asserting what the concept of public interest should mean in telecommunications reform. With either perspective, however, the focus of these analyses is on the interplay of forces and not on providing a systematic analysis of the concept of public interest as it is constructed by members of society, particularly by members of the public. In other words, the discursive component of telecom reform is considered, but not analyzed in depth.

Another limitation of most of these studies is that they examine the concept of public interest as if its definition were confined to the policymaking arena and its most organized participants--policymakers and the industry--, rather than being a social construction in which all members of society are able to participate. What is missing in this body of literature is a systematic diachronic analysis of constructions of the public interest by members of the public, like the analysis proposed in this dissertation. In the following sections, I first provide a brief description of the main characteristics of the political economy approach, and then discuss some representative studies from the political-technological, economic, and historical-discursive perspectives mentioned above.
**Political Economy approach to public interest**

The political economy tradition puts struggles for power and inequalities in its distribution at the center of the analysis. In this sense, this tradition overcomes the neoclassic economics separation of economy from polity by analyzing market outcomes from a perspective which not only re Integrates economics and polity, but also analyzes the interaction and impact of other social factors, such as ideology, culture, law, and technology, on economic and political activity (Babe, 1995). Along these lines, Babe defines political economy as "the study of power in economic affairs." Moreover, he adds, "it is indeed the study of the economy as a system of power" (1995, p. 71). In the analysis of power, Babe affirms, political economists question both the distribution of gains and losses among those parties involved in the struggle and the role played by those who can decide how the gains and losses are distributed. The literature discussed below reflects to some degree some or all of the characteristics mentioned by Babe. For the purpose of clarity, the research is categorized according to the perspective that best characterizes the emphasis given by the author or authors to the different factors being analyzed within the political economy approach. In the following sections, I discuss some examples of these three perspectives and explain how their limitations justify my own research.

**The political-technological perspective**

This perspective is perhaps the closest to the traditional political economist approach. In their analysis of telecommunications reform, scholars categorized within this perspective examine the interaction of economic, technological, discursive, and
political forces, but pay particular attention to the impact of evolving technology and power struggles between stakeholders on the outcomes of reform. Similar to my own interest, the scholars included under this perspective study processes of reform in telecommunications and their consequences, ranging from the divestiture of AT&T (Horwitz, 1989; Powers, 1987) to liberalization processes in Europe (Mansell, 1993) and China (Zhao, 2000) to the processes involved in the establishment of the Telecommunications Act of 1996 in the United States (Aufderheide, 1992, 1999). In their analyses, these authors' interest in the concept of public interest and its changes over time is not from a discursive viewpoint, but from the point of view of explaining how changes in the economic, political and technological environment affect the concept of public interest, as well as the potential social consequences of such changes in the definition. As such, the discourse of public interest is analyzed as just another factor affecting and affected by the way the balance of interests is played out over time. Thus, discourse is considered, but not examined in depth.

In *The irony of regulatory reform* (1989), for instance, Robert Horwitz postulates that the deregulation policies of the 80s affected infrastructure industries under price-and-entry regulation, such as transportation, banking and telecommunications, but left social regulation untouched. He states that an understanding of why deregulation was implemented in this manner requires an understanding first of the role of the state in the economy, which, for him, is closely linked to the particular meaning given to the concept of public interest. For Horwitz, the definition of public interest plays a crucial role in defining state action, including the type of regulatory agencies established and their operation. He states that the promotion
of commerce and the expansion of the marketplace were fundamental public interests that justified the regulatory role of the state in telecommunications infrastructure. Yet this commerce-based concept also fulfilled social equity goals that were attached to particular technologies, including the promotion of diversity of viewpoints in broadcasting and the provision of service for all, under affordable and non-discriminatory terms for common carriers.

In his analysis of the process that ended in the divestiture of AT&T, Horwitz proposes a view of public interest as a balance of interest, as a "black box whose meaning or representation is the terrain of struggle" (p. 9). He states that assessing the meaning of public interest requires the analysis of interacting regulatory, economic, political, legal, and technological forces, which then constitute the center of his analysis. Thus, he focuses on the analysis of the interplay of technological changes, shifts in traditional regulatory operations and the development of new political alliances that facilitated the introduction of deregulation in the American telecommunications sector and forced a redefinition of public interest from "a concern with stability and a kind of social equity to a concern with market controls and economic efficiency" (p. 21).

Although Horwitz's approach to public interest is largely positivistic, he is ultimately concerned about the consequences that this shift in definition may have in the future implementation and achievement of broader social goals, such as universal service and diversity in broadcasting. Along this same line of thought, Powers (1987) points out that the deregulation of telecommunications brings about benefits in terms of
efficiency gains and new services, but the distribution of these benefits and costs may not be equal throughout society, and may in fact have negative results for rural and residential consumers.

Examining the case of Europe, Robin Mansell (1993) points out that as a result of the development of telecommunication systems under state ownership, the concept of public interest remained mostly undefined until recent times, and was closely identified with state actions, since the state was considered to be the legal representative of the interests of the citizenry. As the telecommunications sector in European countries began being liberalized, there was a need to clarify the policy goals related to public interest. Yet, as Mansell points out, in establishing these goals, the standards used for measuring the success in serving the public interest were linked to market-oriented and technological criteria, such as promotion of competition and the establishment of network interface standards, rather than broader criteria emphasizing equality of access to the network.

As does Horwitz's, Mansell's analysis of the patterns of development of telecommunications networks emphasizes the power struggle inherent in the definition of public interest. She clarifies the ways in which the strong influence of the interests of equipment manufacturers, telecommunication service providers, and large users is reflected in the design of the public network, the development of regulation, and the definition of public interest in market-oriented terms, to the detriment of less powerful members of society. In view of this situation, Mansell takes a normative position with respect to telecommunication policy underscoring the need for regulatory institutions
and policy on network development that better responds to the needs of smaller residential and business consumers and promotes access to the public network.

In one of the few studies examining telecommunications reform and public interest in developing countries, Zhao (2000) studies the political and economic interests involved in the opening of telecommunication services to competition and the introduction of policies for the information superhighway in mainland China. Following a political economy approach, Zhao analyzes changes in the concept of public interest accompanying the development of telecommunications in this country. Her approach to public interest, however, tends to be normative, being based on a proposed definition of public interest in social equity terms. For her, public interest means "equitable distribution of communicative and other social resources and a commitment to democratic participation and public welfare in social development" (p. 44).

Zhao's study is close to my own in several respects. She analyzes the case of a developing country with a level of telephone penetration very close to that of Mexico. China, like Mexico, is facing internal and external pressures to open competition in telecommunications while at the same time trying to increase the rate of network rollout in the country. Her analysis also looks at the concept of public interest that accompanies institutional reform in the sector and describes the existence of conflict between the public interest goals pursued by the government and those of other actors, including members of the public. Zhao points out that in China the traditional definition of public interest equated it to the state's interest as the representative of the
citizenry. This definition, however, has recently been challenged by an increasing number of middle class users that are expressing their discontent with rate reforms and redefining public interest in terms of consumer interest.

Notwithstanding these commonalties, Zhao's approach to public interest differs in several important respects from mine. Her analysis does not focus on the systematic analysis of definitions of public interest and the argumentative structure behind them, but on the rhetorical use of the concept by different actors to legitimize their own interests and actions. In agreement with her own definition of public interest, Zhao's focus is on the distributional effects of telecommunications reform, the analysis of the different economic and political interests involved in telecom decisions and the consequences that such decisions will have for the achievement of other social goals, such as education and universal access.

Aufderheide's analyses of the public interest concept in broadcasting (1990, 1992) and telecommunications regulation (1987, 1999) take a normative stand on public interest, defining it as "access to and use of telecommunications" (1987, p. 81) for the telecommunications and cable industries and as diversity of sources in the case of broadcasting. Her analyses of telecommunications regulation focus on the issues of universal service and the debate and outcomes of the Telecommunications Act of 1996, pointing out a tension within the FCC in interpreting public interest as both promotion of a competitive environment and of social goals, such as universal service in telecom, and protection against violent and obscene content in broadcasting. For Aufderheide, "markets encourage innovation, but they did not necessarily ensure the public interest" (1999, p. 108); she questions particularly the capability of markets to promote social
equity and a democratic environment in which a real public sphere could emerge. She points out that the definition of public interest by the FCC is still "ideologically contentious" (p. 82).

Along the lines of Horwitz's (1989), Mansell's (1993), and Zhao's (2000), Aufderheide's analysis of telecommunications reform and the public interest focuses on the struggle between economic and political forces to influence the direction taken by these reforms. Her examination of the 1996 Telecommunications Act shows how the interests of the regulated industry, the FCC, large users, equipment manufacturers, and interest groups participated in shaping the Act. Her study presents the view of consumer groups, but her emphasis is not on the discourse itself.

Finally, Nicholas Johnson (1979) looks at regulatory reform in the United States in the area of broadcasting. He examines the economic and political interests guiding regulatory reform towards a market orientation and emphasizes, in a normative tone, the need for greater organized public participation in the policy arena. He defines the public interest as "a process, not a policy" in which the needs and points of view of all citizens should be equally considered. He points out that economic interests of broadcasters have captured the process of decision-making around the public interest and emphasizes that imperfect competition in broadcasting cannot serve the public interest because it will not promote a marketplace of ideas.

In sum, the political-technological perspective's approach to public interest pays attention to changes in the meaning of this concept over time, but only as it reflects the struggle between the opposing interests of actors involved in the policymaking process, as well as a reflection of changes in the economic, political and technological
environment. With the exception of Zhao (2000) and Aufderheide (1999), these researchers pay little attention to the constructions of public interest of members of the public or their representatives, focusing mostly on the view espoused by policymakers and members of the industry.

The economic perspective

Research within the economic perspective considers the role of public interest discourse and political forces, but gives priority to the manner in which the interaction between the legal environment and the market structure and conduct of the industry affects the performance of telecommunications after reform takes place. Although only a few researches are included within this perspective, their approaches to the study of telecommunications reform and public interest are sufficiently different from the political-technological perspective so as to require a separate category. Haring and Weisman (1993), for instance, compare the effects that asymmetric regulation for rate-setting, favoring either the incumbent operator or the new entrants into the telecommunications marketplace, can have on the achievement of a competitive environment and the benefits obtained by consumers. Their interest in public interest is more utilitarian and normative than positive, since it serves as a justification for the alternative "customer necessity" (p. 105) type of regulation that they propose. For these authors, the regulatory regime of customer necessity, which is based on symmetrical removal of constraints for both the incumbent operator and new entrants, would serve
The public interest better than asymmetrical regulation because it would promote a competitive environment and thus, the interests of customers. Their normative stand on public interest, thus, is market oriented.

Trebing (1995), on the other hand, analyzes the challenges faced by developing countries in implementing privatization of their telecommunications systems from a positivistic perspective. He states that the extent to which privatization will be able to serve the public interest and promote efficiency depends on the fit between the regulatory tools employed and the structure and behavior of the market. Like Haring and Weisman, Trebing examines public interest to the extent that the goals included in this concept might or might not be fulfilled by the interaction of regulative and market forces. In sum, the economic perspective approach to public interest is for the most part not concerned with the meaning of the concept, but about how well it can be served by the balance of regulative and economic forces guiding the reforms in telecommunications.

The historical-discursive perspective

In contrast to the two previous perspectives, the historical-discursive perspective gives prevalence to the analysis of public interest discourse over other factors. It examines the patterns of use and interpretation of the public interest standard based on legal documents and court decisions, and relates them to the interplay of particular political, technological, and economic forces. Some authors (Cooper, 1992/1993; Hazlett, 1997; Krasnow & Goodman, 1998; Ramberg, 1986) within this perspective analyze discourse from a historical point of view, looking exclusively at how regulatory
and judicial bodies, such as the Federal Communications Commission and the U.S. Supreme Court, have interpreted the meaning of the public interest standard over time. Their interest is not in conducting a systematic discourse analysis of the definitions, but in describing patterns of interpretation and their effects on the operations of the regulated industry and the regulator. Cooper (1992/1993), Ramberg (1986), Hazlett (1997) and Krasnow and Goodman (1998) pay particular attention to the specific applications that this concept has had in broadcasting (broadcasters as public trustees) and in telecommunications (universal service). The authors coincide in recognizing the flexibility and broadness of the concept of public interest that allows it to adapt to changing economic and technological conditions. Like the authors in the political-technological perspective, these scholars found that in broadcasting the interpretation of the concept of public interest has shifted from a social equity interpretation, which emphasized the role of broadcasters as public trustees and paid particular attention to issues of content and diversity of voices, to a reliance on marketplace forces to define the meaning of the concept and to ensure the quality of content. This shift is seen as the result of the introduction of new technologies that reduced the validity of the scarcity justification to support the regulation of content, and as a result of the increasing number of sources of content.

Closer to the analytical approach proposed in this dissertation, Gibson (1995/1996), Kopp (1997/1998) and Munn (1999) conducted systematic analyses of the discourse of public interest, using different methods, such as content analysis, narrative, and argumentative approaches. Using a narrative approach, Gibson analyzes the claims used by public officials in the 70s and 80s to justify deregulation of broadcasting
content. She points out that in both periods, officials use the concept of public interest to justify their claims, even while the model of regulation shifted from a public trustee approach to one based on market forces. Kopp studies the role played by philanthropic foundations, such as the Ford and Markle foundations, in influencing the FCC's discursive shift towards a market based definition of public interest. She performs a content analysis on documents from the FCC and the two foundations and finds a shift in the meaning of the concept from one emphasizing values of equality, fairness and diversity of viewpoints to another in which freedom and efficiency were given priority. Kopp concludes that the involvement of these foundations in establishing an epistemic community that favored a market approach to regulation influenced the policymaking process within the FCC and the shift in the Commission's interpretation of public interest.

Gibson's and Kopp's analyses relate to my own research in their application of discourse analysis to the study of the concept of public interest. Yet our approaches differ not only in the specific method used for the analysis, but particularly in the fact that these authors, much as the majority of the scholars discussed within this and the other two perspectives, primarily focus on the definitions of public interest provided by policymakers and other influential groups within the policy making arena. Consequently, constructions of public interest made by members of the public are mostly ignored.

Two exceptions are Zhao's (2000) analysis discussed above and Munn's (1999) examination of the definition of access by public interest groups as part of the debates on the national information infrastructure in the United States. Munn conducts an
argumentative analysis of the discourse of public interest groups as a proxy to the
analysis of the public's perspective on access. He analyzes documents and comments
filed by these groups during rulemaking proceedings and as part of a public inquiry
conducted by the National Telecommunications and Information Agency in 1994.
Although they are included in his sample, Munn gives less attention to press reports on
these groups.

Munn's study differs in two ways from my own research. First, his interest is in
the concept of access and not in public interest per se. Second, his sources of data for
the public are mostly official documents, filed by organized groups for discussion in
official inquiries. In my analysis, the interest is on capturing as much as possible the
definitions of public interest presented by members of the public in their own
vocabulary.

In sum, the historical-discursive perspective provides a more in depth analysis of
how the concept of public interest has been defined over time by different actors within
the policymaking arena. Some of these studies, however, lack a systematic discursive
analysis of the definitions of public interest. Others apply methods of discourse
analysis to examine these definitions, but limit their analyses to a particular group,
either policymakers, epistemic communities, or interest groups. Finally, all these
analyses are centered in the United States, pointing out the need to examine how public
interest is being defined in other countries, particularly in developing ones.
**Contribution to knowledge**

The review of the literature addressing telecommunication reform and the public interest from different perspectives points out several gaps in the study of this concept. First, little attention has been given to the systematic analysis of the meaning given to this concept by different actors. For the most part, the public's definition of the concept of public interest is absent from this body of literature, or if included, the definitions used by interest groups are used as a proxy. This dissertation intends to fill this gap in the literature by examining under the systematic approach of argumentation analysis, the definitions of public interest constructed by the public over time. This study is also original in that it analyzes the constructions of public interest outside the United States, looking at the case of a developing country.

The case study of Mexico presented in this dissertation is also original in that it provides in a single document a detailed description of the process of institutional reform in the telecommunications sector of this country, and of the effects of such reform on the industry's performance, as well as of the consumers' perspective about the reform and its effects on performance for a period of ten years after the reform process began.

This dissertation can also contribute to the literature on policy analysis, particularly to the Argumentative Turn body of research. As stated in chapter one, this dissertation draws from the insights of the Argumentative Turn with respect to the argumentative facet of policy, the interest in making explicit the values inherent in policy and the concern to promote a more democratic policymaking process. Yet this literature exhibits limitations similar to the ones found in the telecommunications policy
literature. Their analyses are for the most part restricted to the arguments and values espoused by policymakers and by regulated industries to some extent; the viewpoints of the public, in contrast, are not considered in the research within this tradition. An exception is the work of Throgmorton (1993, 1996) on the rhetorical tropes used by consumers, regulators and representatives of the energy utility in Chicago. Yet Throgmorton's analysis, similar to the political-technological perspective, approaches the rhetoric of planning espoused by these actors as one more of the factors interacting in the struggle between economic and political interests.

In this sense, the analysis proposed in this dissertation would contribute to this literature by focusing on the discourse of public interest in telecommunications policy employed by users from an argumentative perspective. Finally, this dissertation can also contribute to policy analysis by becoming a bridge between the literature on telecommunications policy and the argumentative turn of policy analysis.
CHAPTER 3

METHODOLOGY

The purpose of this dissertation is to fill a gap in the literature by analyzing the constructions of public interest made by members of the public with respect to the goals and outcomes of the process of institutional reform in telecommunications in Mexico. In order to identify and examine these constructions, a qualitative methodological approach is used, focusing on the analysis of the case study of Mexico. The selection of a case study was deemed appropriate due to the discursive and culturally-bounded nature of the object of study. The particular content of arguments about public interest made by members of the public, that is, the particular claims and evidence employed in justifying their actions and opinions, are influenced by the spatial and temporal context in which they take place.

The intensive focus of a case study facilitates a better analysis of this context and the examination of how actors interact with it (Sayer, 1992). According to Andrew Sayer's (1992) description of intensive research in Critical Realism, the analysis of "how the context is structured and how the key agents under study fit into it--interact
with it and constitute it--is vital for explanation" (p.248). In this chapter I present an overview of the case study, the data collected for the analysis, and the method of analysis.

Research Design and Method

The case study

This dissertation employs an intensive case study approach. The case of Mexico was selected because of the interesting contrasts presented by its telecommunication sector. On the one hand, Mexico represents the type of challenges faced by developing countries with middle to low telephone penetration. Mexico has a population of approximately 94 million, which is growing at a fast rate.\(^1\) As is the case in other developing countries, the implementation of institutional reform in Mexico has been affected by adverse macroeconomic factors, such as low levels of GDP per capita (US$4,386 in 1998) and strong economic shocks, like the crisis of 1994 (OECD, 1999c, p. 12). Despite some progress, by December 2001, eleven years after the telecom reform began, Mexico had only reached a level of telephone penetration of 13.7 fixed lines per hundred inhabitants, up from 6.4 in 1990; the number of payphones increased from 94 thousand in 1990 to 2.2 million payphones in December of 2001 (Osterroth, 2002d; Telmex, 2002), and the rates for business and residential telephone service baskets were well above OECD averages (OECD, 1999b).

On the other hand, Mexico is ranked among developed countries with respect to the large size of its telecommunications market and of its incumbent telecommunications operator, Teléfonos de México (Telmex). This country’s
The telecommunications sector ranks 12th largest in revenue (US $7.6 billion) among the 29 current OECD countries, ranking it just ahead of Sweden, the country with the highest telephone penetration in the world. Telmex is the 20th largest telephone carrier in the world, and the 10th largest outside the US (OECD, 1999b), and was recently nominated as the best telecommunications company worldwide in 2002 by *Forbes* magazine, based on an evaluation of the company's performance on financial parameters and revenue growth, among other criteria ("The world's", 2002).

The case study focuses on the analysis of explicit and implicit constructions of public interest stated by members of the public when expressing their opinion about telecommunications reform in Mexico. Because Telmex, the former Mexican public telecommunications operator (PTO), has been at the center of the telecommunications reform process in Mexico, most of the discourse of reform and public interest revolves around its performance. The privatization of Telmex in December of 1990 marked the beginning of institutional reform in the Mexican telecommunications sector. As part of its privatization, Telmex was granted a *de jure* monopoly on national and international long distance telephony until August of 1996, and also had a *de facto* monopoly on pay phones and local telephony until the late 1990's. Competition in long distance services began in 1997, followed by the entry of new service providers in other telecommunications markets in the subsequent years. Yet, by the end of 2001, Telmex still had a dominant presence in all the telecommunications markets in Mexico, holding 98 percent of the local service market, 80 percent of long distance, 76 percent of the mobile telephony, and 69 percent of Internet (Aguilar, 2001, ¶ 2).
The data analyzed in this dissertation cover the period from 1991 to March of 2001, representing the six years of Telmex's private monopoly and four and a half years of the competition period in Mexico. Consequently, the evaluation of Telmex's performance plays a greater role in the discourse of consumers in Mexico than the evaluation of its competitors. As the presence of competitive providers in the different markets increased, so did the number of references to them in the consumers' discourse about telecommunications reform.

Research Method

Data collection method

Data on public interest discourse is collected using documentary research of primary sources. The analysis is conducted on a sample of letters written by members of the public and published in the column *Espacio del Lector* (Space of the Reader), a regular feature of a Mexican newspaper of national distribution, *El Financiero*. In these letters members of the public—both current and potential consumers—express their concerns about the different telecommunications services provided in Mexico, from basic wired telephony, to wireless communications, to Internet services.

The decision to conduct documentary research to identify constructions of public interest was based on the desire to gain insight into the voice, concerns, and interests of consumers without the external influence of the researcher guiding them in the use of certain words or towards particular topics, as may happen with surveys and interviews. The interest in consumer complaints published in the press is also justified by the important role that this medium plays in the symbolic environment in which
private and public stakeholders act (Samarajiva, 2000b). Roger Noll (1971, 1985) proposes that the press is one of the important sources used by administrative agencies to perceive the public interest because it is an institution considered to have some legitimacy in representing the voice of the public. According to Noll (1985), regulatory agencies use the press to monitor the responses of other institutions and stakeholders, including the public, to their policies and decisions.

Noll's (1985) "External Signals" theory of regulation assumes that one of the objective interests of regulatory agencies is to serve the public interest, but to do so they have to confront the obstacle of first identifying the content of this vague goal. Noll argues that the policies and actions of administrative agencies are regularly judged by actors from institutional settings external to the agency--what he calls "theaters of external judgment" (1985, p. 41)--, such as the courts, the legislature, the press, and interest groups, among others, who can exert some economic or political influence on the agency. He states that the judgments or external signals sent by these actors are important to the agencies because they are indicators of the extent to which the implemented policies have succeeded in serving the public interest. These indicators, however, are not necessarily unbiased because they can be influenced by the relative level of organization, as well as by the financial and political power of the involved stakeholders (Noll, 1971). Nevertheless, Noll (1985) points out that the general public, through the press, along with the courts and elected political officials, is one of the "three sources of signals that most plausibly could be interpreted by an agency as representing the public interest" (p.42).
From a practical point of view, the interest in the consumer perspective is also justified by recent research on the role of public utilities commissions and regulatory agencies in the new regulatory environment (Sevel, 2001, Wirick, 2001). This literature points out that, as part of their adaptation to the changing environment, these public entities are giving increased attention to their role in consumer protection and education. Since consumer complaints are the most frequent form of communication between regulatory agencies and consumers, the analysis of complaints has become an even more important activity in recent years as a means to better understand consumer needs and concerns. Recognizing the important source of information contained in consumer complaints received by federal and state regulatory agencies, Michael K. Powell, current Chairman of the Federal Communications Commission (FCC) of the United States, stated:

We are working hard to improve our processes . . . to make better use of the information we receive. We take in a wealth of information at our customer centers and we are now developing systems that will analyze the data and report consumer concerns to the policy bureaus so that they can track consumer issues and integrate solutions into rulemakings. (Powell, 2001, p.7)

This dissertation intends to collaborate in this endeavor by providing an alternative approach to the analysis of consumer complaints, which focuses on consumers' values, as well as on their expectations and on the criteria they use in evaluating the performance of telecommunication services after institutional reform.
Data sources

In this dissertation, the point of view of the consumers is extracted from the Mexican press, relying exclusively on the column *Espacio del Lector* (Space of the Reader), which is published in the national newspaper *El Financiero*. The purpose of this column is to be a forum for the expression of public opinion through the publication of letters on different topics that are sent to the editor of the newspaper by members of the public. The column *Space of the Reader* was selected as the source for data on consumers' constructions because in it members of the public express their opinions on the process of telecommunication institutional reform in Mexico, particularly evaluating the effects of this reform on the performance of Telmex.

To obtain a better understanding of the way in which the letters are selected for publication and of the types of editing done to the text, I conducted an interview with the person in charge of the column, Carolina Pozas. According to Pozas, the newspaper's policy is to publish the letters with a minimum of changes and to include the entire text of the letters to the extent this is possible. These two characteristics of the column made it particularly useful for the purpose of this analysis because it preserved most of the original language employed by the public. The column is a regular feature of the newspaper, appearing about five days per week and occupies from 1 to 3 pages of the daily. On average, 95 percent of the letters received are published within five working days (C. Pozas, personal communication, January 6, 2000).

The column was also selected because of the characteristics of the newspaper, *El Financiero*, in which it is published and of its readers. As stated above, this newspaper has national coverage --with presses in 5 different regions of the country and 51
regional offices in 27 states—and it is distributed daily in over 220 cities in the country, allowing it to reach a wide range of readers (El Financiero, n.d.). Its subscribers are diverse in origin, level of education, gender, and age (see Table 3.1). The letters printed in the column *Space of the Reader* reflect this diversity to a certain level, with approximately 20 percent of the letters being sent by people outside Mexico City and its suburbs (C. Pozas, personal communication, January 6, 2000). This is important because the sample was able to capture some of the concerns and values of consumers outside big urban areas, such as Mexico City.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Distribution</strong></td>
<td>Mexico City and Suburbs: 54%; Rest of the Country: 46%</td>
</tr>
<tr>
<td><strong>Socioeconomic level</strong></td>
<td>High and Upper Middle level: 42%; Middle level: 55.3%;  Middle low and Low: 2.7%</td>
</tr>
<tr>
<td><strong>Level of Education</strong></td>
<td>Bachelor degree: 56.5%; Masters: 14.8%; incomplete bachelors degree: 11%; High School: 5.4%; Incomplete High School degree or lower level of education: 8.7; Ph.D.:3.6%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>Male: 68.2%; Female:31.8%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>18-35 years old: 47.5; 36-55 years old: 41.4; Older than 55:10.1%</td>
</tr>
</tbody>
</table>

Source: El Financiero (n.d.).

Table 3.1: Profile of the readers of the newspaper *El Financiero*
Established in October of 1991, the column has become over time a point of contact for private and public organizations and the public. *Space of the Reader* has achieved a good reputation among its readership because of its success in getting responses from the institutions that the complaints refer to. As a consequence, most of the published letters are complaints about services provided by private and public institutions, particularly banking, telephony, and electricity, or commentaries on political and social events. Among all the letters sent, complaints against Telmex were one of the two most frequent topics for the 1991-2001 period, along with complaints against banks. For this reason, the majority of the letters selected for the analysis are also complaints, with the remainder being composed of thank you notes sent by consumers after their problems were solved.

In fact, due to the extensive number of complaints against Telmex published in the column, in 1995 *Space of the Reader* and the office of Public Relations of Telmex established a phone line dedicated exclusively to faxing copies to Telmex of the letters and other information provided by the public. This action not only increased the number of positive responses obtained from Telmex, but also the number of letters sent by consumers trying to get solutions to their problems with the company. For all these reasons, this column was considered to be a good source of data, and, particularly, a good proxy to the language used by consumers when referring to issues of telecommunications and the public interest.

The period of time selected for the analysis extends from the initial date of the *Space of the Reader* in October of 1991 to March of 2001, when the most recent letters in digitized form were available. For the period of Telmex's private monopoly, the
letters consisted of public complaints about Telmex's performance, since it was the sole provider of wired local and long distance services. After January of 1997, when the long distance market was opened to competition, the sample of letters also included references to the services provided by new service providers through wired and wireless technology.

The population of letters published from 1991 to 2001 that referred to Telmex and its competitors was collected. However, the analysis was conducted only on a random sample of 277 letters because of the large number of documents (more than 400 documents). The sample was compiled by selecting the letters published during six months of every year, choosing the even months for the years 1993, 1995, 1997, and 1999, and odd months for the even years (1992, 1994, 1996, and 1998). The only exceptions to this rule were the years 1991, 2000 and 2001, when all the published letters were included due to their limited number. In cases when no letters were received in one of the selected months, the letters from the immediately following month were analyzed.

Data analysis method

The analysis of public interest constructions was carried out using the method of argumentation analysis. Based on van Eemeren, Grootendorst and Kruiger (1987), argumentation is understood as the process of producing statements--either in oral or written form-- to support or refute an opinion or claim, with the purpose of convincing an audience. These researchers, like other seminal scholars before them (Perelman & Olbrecht-Tyteca, 1969; Toulmin, 1958), depart from the tradition of argumentation as
logical reasoning to reintroduce a more dynamic and interactional view of argument involving an arguer and an antagonistic audience. It is important to point out that the interactional or dialectical view of argument is not limited to face-to-face encounters between two opposing arguers. Indeed, even in the case of "monologic texts," (van Eemeren, Grootendorst, Jackson & Jacobs, 1997) where only one side of a discussion is represented, such as the documents that are analyzed in this dissertation, there is still interaction because the author develops his argument with an antagonistic audience in mind and with the purpose of convincing them of his viewpoint.

Thus, argumentation is considered a social act because it is socially motivated and oriented, that is, the speaker assumes the existence of a listener that will interpret and evaluate his or her statements. Argumentation is also considered a rational and purposeful activity, where rationality is defined as "founded in thought" (van Eemeren et al, 1987, p. 2). Based on these characteristics of argument as a social-rhetorical and rational process, studies employing argumentative analysis have focused on describing the structure of arguments and in evaluating the rationality, adequacy, and validity of their patterns and inferences. Since the purpose of this dissertation is to identify and describe constructions of public interest rather than making any judgments about the rationality of these constructions, the usage of argumentative analysis is limited to its more basic capabilities for the analysis of argument structure and for the identification of implicit and explicit values and hierarchies employed by consumers to support and legitimize their opinions about public interest.
The analysis of argument structure implies the identification of the two basic elements that compose a simple argument: one premise and a claim that is derived from it. Claims are the opinions or conclusions that the arguer wants the audience to accept, and their strength is derived from the evidence provided in the premise. Premises, on the other hand, are statements containing data, beliefs, or facts accepted as true which are given as evidence to support a claim. The information contained in the premise is assumed to be "the most verifiable and least arguable statements in the argument" (Inch & Warnick, 1998, p. 298), in other words, it does not need to be justified.

Perelman and Olbrechts-Tyteca (1969) classify premises into two categories: those referring to the real, that is, positive statements about facts, truths, and previously accepted claims, and those referring to the preferable, that is, normative statements that derive their strength from values, beliefs, and hierarchies (Warnick & Kline, 1992). Some premises can also be left unstated in order to avoid repetition of agreed upon knowledge or to manipulate the audience into agreement by omitting conflicting information (van Eemeren et al, 1987).

More complex argument structures can be constructed from the basic pattern premise → claim. Compound arguments can be created by linking multiple premises to one or more claims (coordinate compound argument) or by connecting claims to form a chain of arguments in which intermediate claims are used as premises for a primary claim (subordinate compound argument), among others (Inch & Warnick, 1998; van Eemeren et al, 1987). For the purpose of this dissertation, the analysis of the structural patterns of argumentation around the concept of the public interest is made
not at the level of a single document, but across documents, in order to reflect how recurrent premises and claims are linked through time by different members of the public.

Besides premises and claims, scholars in argumentation have paid particular attention to the often implicit reasoning or warrants--in Toulmin's terms (1958)--used by arguers to justify their jump from premises to claims. The information contained in the warrant can be further legitimized, if necessary, by invoking a broader well-accepted set of principles that Toulmin calls backing. Both types of connective elements are considered important because the persuasive or rhetorical strength of an argument relies to some extent on them. Warrants and backing are culturally-bounded; their selection and usage in an argument is influenced both by the context in which argumentation takes place and by the arguer's knowledge of the habits of thought, values, beliefs, and assumptions of the expected audience. The use of argumentation analysis in this dissertation then provides a valuable tool to identify the values that consumers implicitly or explicitly use in connecting their premises and claims.

Finally, in his analysis of argumentation, Stephen Toulmin (1958) underscores the influence of context on the selection of premises and warrants, as well as on the audience's acceptance of an argument. For Toulmin (1958), "utterances are made at particular times in particular situations, and they have to be understood and assessed with one eye on this context" (p. 182). The interpretation of the context by the speaker and his audience is particularly important, because, as van Eemeren, Grootendorst, and Kruiger (1987) point out, "if their interpretations are different in every respect a meaningful exchange of ideas becomes impossible" (p.11).
It is important to point out that, although the analysis of the constructions of public interest language is expected to bring out different interpretations across time, the potential meanings are not infinite. Maynard-Moody and Stull (1987) state in this respect that "administrative policy, like any form of communication, does not say all things; the potential meanings are few" (p.253).

In sum, argumentative analysis is a useful method for the analysis of consumers' constructions of the public interest because it focuses on the identification of the different claims that constitute the argumentative structure of consumers and the values that consumers used to support their claims.

**Analytical Procedure**

The argumentative analysis used in this dissertation followed an inductive process going from the particular to the general. This procedure was loosely based on the process of dialectical reconstruction of argumentative discourse proposed by van Eemeren, Grootendorst, Jackson and Jacobs (1993). In order to identify the different implicit and explicit objects of analysis (topics, themes, arguments, and values), the analysis followed three steps:

1. *Identification of areas of performance and themes:* This step allowed situating the constructions of public interest within the context of institutional reform of telecommunication.
2. *Identification of values*
3. *Construction of public interest arguments*
In the latter step, compound arguments were simplified to distinguish the statements used as justifications (premises) and those used as opinions (claims) that consumers put forward to support their standpoint about the identified themes. Omitted premises were identified and made explicit. Once recurrent simple arguments were defined, it was necessary to identify the connections that consumers made between these arguments, in order to reconstruct their primary claim about public interest.

In reconstructing main arguments about public interest, the transformations of deletion, addition, permutation, and substitution proposed by van Eemeren et al. (1993) were employed. These transformations allowed the researcher to eliminate repeated material, clarify omitted information, and change the order in which the arguments were originally presented in the text in order to develop a clear model of the argument put forward by the consumers. The three-step analytical procedure described above was applied to the set of documents for consumers for the years 1991 to 2001.

**Unit of analysis**

The basic unit of analysis used to divide the elements in the text was the "idea thought" or "idea unit". That is, a clause composed of at least a subject and a verb that can be understood on its own as a complete sentence (Saeki & O'Keefe, 1994). Saeki and O'Keefe (1994) operationalized the idea unit as a single independent clause. For this analysis, a simple sentence (subject/verb/complement) was considered a single idea unit.

Complex sentences composed of several independent clauses were divided into as many idea units as there were independent clauses. Complex sentences integrated of a single independent clause and one or more nonrestrictive subordinate clauses.
(clauses that provide further information but are not essential to the meaning of the sentence) were considered as a single unit whenever the content of both clauses referred to the same topic. Two exceptions to this general rule were established. The first type of exception was whenever the nonrestrictive clause provided information useful for the analysis that otherwise would be lost by considering it as a unit together with the independent clause. In this case, the nonrestrictive clause was considered as a separate unit with an omitted subject. Second, for complex sentences consisting of a single subject and multiple predicates, each predicate was considered as a separate unit with a common subject whenever one or more of the predicates referred to a different topic. In total, 2,821 units were identified in the consumer letters used in this analysis. Table 3.2 shows the distribution of units from 1991 to March of 2001.

<table>
<thead>
<tr>
<th>Year</th>
<th>Letters</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>6</td>
<td>120</td>
</tr>
<tr>
<td>1992</td>
<td>38</td>
<td>229</td>
</tr>
<tr>
<td>1993</td>
<td>35</td>
<td>351</td>
</tr>
<tr>
<td>1994</td>
<td>64</td>
<td>295</td>
</tr>
<tr>
<td>1995</td>
<td>29</td>
<td>224</td>
</tr>
<tr>
<td>1996</td>
<td>23</td>
<td>300</td>
</tr>
<tr>
<td>1997</td>
<td>27</td>
<td>380</td>
</tr>
<tr>
<td>1998</td>
<td>24</td>
<td>398</td>
</tr>
<tr>
<td>1999</td>
<td>15</td>
<td>241</td>
</tr>
<tr>
<td>2000</td>
<td>13</td>
<td>219</td>
</tr>
<tr>
<td>2001/March</td>
<td>3</td>
<td>64</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>277</td>
<td><strong>2,821</strong></td>
</tr>
</tbody>
</table>

Table 3.2: Distribution of documents and units coded in the analysis per year
**Process of Codifying**

Before beginning the analysis and categorization of the identified idea units, the documents selected for the analysis were reviewed to obtain general information about the type of document, the demographic characteristics of the consumers writing the letters to the editor, and the type of telephone service that the document refers to.

Among the information coded under the descriptor of *General Information* were:

1. Date of the letter.
2. Information about the type of letter to the editor, including the number of letters included in the document, if it was a thank you letter or a complaint, and the company that the letter referred to (Telmex, long distance competitors, wireless service providers).
3. Demographic information about the consumer writing the letter, including type of author (individual, organization), gender if the author was an individual, number of people signing the letter, origin (Mexico City and its suburbs, rest of the country, or not available).

Since the literature on consumer complaints has pointed out that the majority of the persons writing complaints have a higher level of education there was an interest in identifying the education level of the authors. However, this was not possible because the letters only included the name of the author without any reference to his or her degrees (B.A., M.A., et cetera). Thus, the category of education was dropped.

The information on *Type of Service* included references made in the text to different types of telephone services, from basic residential and business services, including measured service, to long distance telephony, from payphones to wireless
telephony and new services, such as Internet connection. This category helped identify the services that consumers complained about. The category of Type of Service includes the following services: Local service, long distance, measured service, payphones, wireless, and new services (Internet services, third party call, caller-ID, etcetera).

Coding categories

The analysis employed three different coding categories: a) Industry Performance, (b) Themes, and (c) Values, defined below. These categories were determined inductively, derived from a pilot study conducted on a subsample of consumer letters, in which semantic similarities in the types of expressions used by consumers were identified. Once the major categories were defined, a set of subcategories was developed for each category in order to better capture the different subjects discussed by consumers within a particular category.

The subcategories for Themes were derived inductively from the pilot study, while those for Performance and Values were defined deductively, using criteria developed elsewhere. In the case of Industry Performance, the subcategories were defined from criteria used by regulatory and policy entities worldwide to evaluate the performance of telecommunication service providers. For values, the subcategories are based on van Dijk's (1998) classification, which includes the dimensions of mind, body, character, action, interaction, and society.
The purpose of identifying values expressed in the consumers' letters is to determine the actions and/or characteristics of the different actors that consumers tended to prefer or dislike in the process of telecom reform. To this end, the selection of van Dijk's classification was considered appropriate because it categorizes values according to the type of subject or object being evaluated by it, instead of based on the type of desirable conduct or end state that a particular category of value refers to, as is the case with Milton Rokeach's (1973) classification of values into instrumental and terminal values. Even though Rokeach's classification of values, like van Dijk's also differentiates between personal and social values, I consider that van Dijk's classification is still more useful for the purposes of this dissertation because instead of jumping from the personal to the social level of values, van Dijk's introduces intermediate categories which are of particular interest to the present analysis, such as action and interaction. Based on the pilot study results, it can be said that consumers tended to employ action values to evaluate the performance of the different providers, while interaction values were often used to emphasize desirable attitudes of the service providers' employees when interacting one-on-one with consumers. The inclusion of the dimension of interaction values is also important because it includes some of the values and norms that Quinn (1980) defines as fundamental for the realization of the public interest, such as respect, tolerance, and empathy.

To ensure that the process of codifying would produce reliable results, reliability tests were conducted on both the coding and unitization processes with the help of a Spanish-speaker coder. A subsample of 26 letters, that is, approximately 10 percent of the total sample was selected using a random numbers table and then divided into units.
by the two coders, achieving an overall percentage of agreement for the unitizing process of 0.98. The 272 identified units were then independently coded by the two coders into the subcategories developed for the categories of Performance, Themes, and Values. A total of 20 subcategories were used in the analysis: five for performance, ten for themes, and five for values. These numbers include a subcategory of "other" under each of the three categories.

The level of reliability was measured using Kappa, a test that determines the proportion of agreement in categorization that occurs between two or more coders beyond a level that could be expected just by chance (Cohen, 1960). The overall coding reliability for performance was .92, for themes .81, and for values .77; the three results indicated a high level of agreement. As a result of the discussion and resolution of disagreements during the intercoder reliability test, the definition of the concepts included in a particular subcategory was improved and some infrequent subcategories were either dropped or combined into other more general subcategories.

As stated above, the process of unitization of the complete sample identified a total of 2,821 units of analysis. Each of these units was coded three times to identify those that referred to industry performance, or reflected a particular theme or value. Thus, a particular unit could be coded under up to three different subcategories, one for performance, one for themes, and one for values. If the content of a unit only fit under one of the three categories, then it was coded as "other" for the remaining categories (i.e., none of the subcategories included in the remaining two categories), in this way each category has the same number of coded units. Each of the three categories used in the analysis are described below, including all of their subcategories.
Category 1: Industry Performance

This categorical set refers to criteria typically used by regulators to evaluate the operation of telecommunication companies in different dimensions of performance, such as connectivity, affordability, quality of service, innovation, and choice (Samarajiva, 2000a). Since the information about innovation is partly captured under the code named type of service, it was not included as one of the subcategories of performance, to avoid repetition and overlapping categories. The four subcategories of Industry performance are defined as follows:

1.1 Connectivity

Refers to actions related to network rollout, access to services (payphones, residential and business lines, wireless access), the process of getting connected to the network (waitlist, installation contract, speed of installation after paying for a line), as well as the process of termination of service and final disconnection from the network due to lack of payment. Temporary disconnection from the network due to technical failure is not considered within this subcategory because of being considered a matter of quality of service. For example:

"con gran tristeza he regresado de las oficinas de Telmex cuando acudo a solicitar la instalación de una línea en mi departamento, y me dicen simplemente "que no se puede."
[with great sadness I have returned from the offices of Telmex [where] I [went] to request the installation of a line in my apartment, and they simply tell me "that it cannot be done."]

"me dijo que no me preocupara, que en ese mismo instante me desconectaba. El irresponsable sí me desconectó.
[He told me that I shouldn't worry, that he would disconnect me at that same moment. The irresponsible [guy] did disconnect me.]"
1.2 **Affordability**

This subcategory includes references to the cost of access and services, as well as to the ability of consumers to pay for them. It encompasses references to the cost of getting access to telephone services (connection charges), of maintaining this access (monthly basic rent), and the cost of the types of services mentioned above. For example:

"¿Cree usted que sea justo que los habitantes de Ma. Andrea tengan que estar sin servicio, después de haber pagado recientemente alrededor de dos mil pesos, por la instalación del servicio?"

[Do you believe you that it is fair that the inhabitants of Ma. Andrea have to be without service after having recently paid about two thousand pesos for the installation of service?]

"pagamos [las llamadas], dado que su duración (un minuto) no implicaba un costo grande."

"we pay [the calls], since their duration (one minute) didn't imply a big cost."

1.3 **Quality of service**

This subcategory refers to the expectations of consumers about the provision of telephone service in Mexico, including the technical and human aspects of service. It includes four broad areas: (a) general expressions regarding the quality of service rendered by Telmex and its competitors; (b) equipment-oriented quality of service (network call completion, operator handled calls, service continuity, such as lines with failure, repair delays, repeat trouble reports), (c) people-oriented quality of service (customer service, employee's attitudes and knowledgeability), and (d) billing and collecting. For example:
"Reporto a ustedes la ineficiencia de actitud, de servicio y falta de profesionalismo por parte de empleados de Telmex para con los usuarios."
[I am reporting to you the inefficiency in attitude, service, and lack of professionalism on the part of Telmex's employees towards the users.]

"con prepotencia exigen un pago que no procede."
[with prepotency, they demand a payment that doesn't proceed.]

1.4 Choice

This subcategory includes references to the availability or lack thereof of options in type and quality of services, technologies, and suppliers accessible to consumers. Since references to choice in suppliers are closely linked to criticisms of the monopoly status maintained by Telmex during most of the timeframe of study, references to the monopoly and the level of concentration in the telecommunications market are also included under this subcategory. For example:

"Lamentablemente en México no tenemos otra alternativa de comunicación telefónica local"
[Regrettably, in Mexico we don't have another alternative for local telephone communication].

"la competencia desleal en larga distancia podría obligar a compañías como Avantel y Alestra a salir del mercado con consecuencias nefastas para los consumidores."
[unfair competition in long distance could force companies like Avantel and Alestra to go out of the market with disastrous consequences for consumers.]

Category 2: Themes

Getting into a more abstract level than Industry Performance, the category of Themes has the purpose of grouping into subcategories recurrent ideas, concerns, or topics that consumers express and take a standpoint about when complaining about the industry's performance. The subcategories were determined after a pilot study of a sample of consumer letters. The set of initial nine subcategories was refined as a result
of the intercoder test to avoid overlaps. While some themes are closely related to a particular dimension of performance, others are recurrent across performance dimensions. The following subcategories are included under themes:

2.1 *Competition*

Includes references to the entry of new operators in the Mexican telecommunications market, as well as the benefits obtained from the introduction of competition in the market, including technological change and the ability to choose among providers. This subcategory also includes references to barriers to competition and the elimination of these barriers. For example:

"Si otra compañía telefónica ofreciera sus servicios, no dudaría en optar por ella de inmediato."
[If another company offered its services, I would not doubt to opt for it immediately.]

"la competencia desleal en larga distancia podría obligar a compañías como Avantel y Alestra a salir del mercado con consecuencias nefastas para los consumidores."
[unfair competition in long distance could force companies like Avantel and Alestra to go out of the market with disastrous consequences for consumers.]

2.2 *Consumer action*

References to actions taken by consumers, individually or as a group, trying to solve their problems with a telecommunications operator, such as writing letters to government authorities, registering complaints before the Consumer Protection Agency (Profeco), complaining personally at customer service branches. For example:

"Me quejé con Avantel"
[I complained to Avantel]

"Lo he reportado varias veces al 05 y además presenté una queja a la Profeco"
[I have reported it several times to 05 and also submitted a complaint before Profeco].
2.3 *Consumer emotions*

This subcategory includes references to feelings that consumers have when facing problems with their telephone service. Since most of the letters to the editor are complaints, the feeling of anger is somehow expected. Thus, this subcategory includes only references in which the consumer explicitly expressed how he or she felt in a particular moment. Among these are: loyalty, shame, frustration, desperation and a sense of injustice. For example:

"Me dirijo a usted porque estoy desesperada por la atención que recibo de Teléfonos de México"
[I am writing you because I am despaired by the type of attention I receive from Teléfonos de México].

"es una frustración la que siento por la impotencia de no poder arreglar este problema."
[it is frustration that I feel because of the impotence of not being able to fix this problem.]

2.4 *Consumer evidence*

This includes references to documents (e.g. bills or receipts, tallies of calls made, etc.) or to activities that consumers use as evidence of their actions when disputing a charge or an action of the telephone operators. The type of evidence that consumers have access to is a recurrent concern for them since its quality and acceptability from the perspective of the service provider affects a consumer’s chances of resolving a problem with a particular operator. For example:

"Sin embargo, cuento con el comprobante de pago."
[However, I have the payment voucher.]

"Durante mi ausencia, nadie usó mi teléfono. Nadie tiene acceso a mi casa."
[While I was absent no one used my telephone. No one has access to my house.]
2.5 Definition of self and others

It refers to the perceptions that consumers have of themselves and of other key actors in the industry, such as Telmex, the government, and new service providers. This includes references of Cofetel and the SCT as rulers and to the role they play in the industry, perceptions of consumers of themselves as users and as victims of Telmex.

For example:

"el propio gobierno, en lugar de ver por el pueblo con quien está obligado, protege a empresas"
[the government itself, instead of protecting the people with whom it has an obligation, protects the companies].

"los usuarios estamos a merced de la eficiencia y honestidad de Telmex."
[the users are at the mercy of the efficiency and honesty of Telmex.]

2.6 Industry policies and actions

This subcategory includes consumers' references to internal policies implemented by Telmex and the new competitors with respect to customer services, network extension, and other areas of performance. Actions, on the other hand, refers to replies given by the service providers to consumer complaints, as well as to actions taken by the telecommunications operators that affected consumers, such as rate increases and suspending lines due to lack of payment. For example:

"en cualquier caso le solicitan al cliente cautivo que "primero pague y después haremos cualquier aclaración".
[in any case, they ask the captive customer to "pay first and then we will provide explanations"

"Dicha contestación es una mentira palabra por palabra."
[Such an answer is a lie word by word]
2.7 Efficiency in the provision of service

Includes references in which the consumers emphasize the absence of a certain characteristic of service that they considered the telecommunications operator should provide. It includes issues such as: waste or misuse of resources (personnel, time, money, technology), lack of transparency in billing (payment but no service, unjust payment, unjust charges), lack of solutions and information, insufficient speed and resources in the provision of service and solutions, and the contrast between promises made and actions taken by operators. This subcategory provides details about recurrent topics of quality of service. For example:

"han pasado un mes y tres días de mi petición"
[it has been one month and three days since my petition]

"Estoy consciente que tras esta denuncia quizá tenga que prescindir del servicio pues no se ha hecho nada al respecto."
[I am conscious that after this complaint I might have to do without the service since nothing has been done about it.]

2.8 People

It includes references to problems faced by consumers when interacting with employees of Telmex and the new service providers, such as lack of cooperation and incompetence. Although originally these types of complaints were coded as part of the subcategory of efficiency, the prominence given by consumers to issues of mistreatment and lack of cooperation on the part of telecommunication employees made it clear that it was a subcategory on its own. For example:

"Reporto a ustedes la ineficiencia de actitud, de servicio y falta de profesionalismo por parte de empleados de Telmex para con los usuarios"
[I am reporting to you the inefficiency in attitude, service, and lack of professionalism on the part of Telmex's employees towards the users].
2.9  Power

It refers to relationships between actors (consumers, government, operators) in which authority, capacity or control is exercised under conditions of inequality. This subcategory includes references to abuses of power by employees and/or telephone operators through coercion, corruption, and discrimination, as well as references to the inability of consumers to exercise power (e.g. lack of verification of charges). For example:

"No se sorprenda usted de las manifestaciones populares que existen por falta de justicia, exceso de burocracia y corrupción."
[Do not be surprised by the popular demonstrations that occur due to lack of justice, excess of bureaucracy, and corruption.]

"[Telmex] tiene al pueblo cautivo"
[(Telmex) has the people captive]

2.10 Regulation of the industry and rulemaking

This subcategory refers to the body of law regulating the telecommunications industry. It includes references to the content of particular regulatory documents, such as Telmex's Concession Title; the objectives and achievements of regulatory actions; references to rights consumers thought they should have; the manner in which the rulemaking process is expected to work (transparency, efficiency, responsibility); as well as actions taken by the Mexican telecommunications regulatory commission, Cofetel, and/or the Consumer's Protection Agency to regulate the behavior of the industry and protect consumers. For example:

"una posición de monopolio que va contra las leyes"
[a monopoly position that goes against the law].
"Me pregunto si nuestras leyes no establecen una sanción para aquellas empresas que como Teléfonos de México, utilizan la publicidad masiva... para mentir y desinformar"
[I wonder if our laws don't establish sanctions for those companies that, like Teléfonos de México, use massive advertising... to lie and misinform].

2.11 Importance of telecommunications and/or telephony

This subcategory includes references to the value of telecommunications services at the individual and social levels. Why it is important to have access to these services includes topics such as the link between telephone extension, national productivity, and development, as well as explicit references to the manner in which society's well-being can be or is being pursued or fulfilled by the implementation of institutional reform in the telecommunications sector. For example:

"Actualmente este servicio es necesario, no un lujo"
[Currently this service is necessary, not a luxury].

"El país necesita que la visión de los empleados, así como la de los empresarios, cambie para llegar a un progreso real, no sólo de palabra."
[The country needs that the vision of the employees, as well as that of the managers, changes in order to arrive at real progress, not only in words.]

Category 3: Values

According to Goldthwait (1996), value "is a conception of what the object ought to be like, and an expression of value ordinarily states whether the object is or is not like what the speaker or writer believes it ought to be" (p.127). As such, a value is an attribute that expresses the relative worth or importance of an object. For the purpose of this dissertation, the process of codifying values required searching for particular words expressing value preference. In this sense, the codification followed a conservative approach that focused as much as possible on explicit expressions of value preference.
This was considered necessary to avoid over-interpretation on my part of the implicit values included in the letters, especially as most of the customers wrote to complain about the industry and its services, which implies that the letters are an evaluation per se. Although I followed this conservative approach, I recognize that the implicit expressions of value can be culturally read as evaluations within the language of the speech community of this study.

As stated above, the subcategories of value are based on van Dijk's dimensions of value. However, the dimensions of body and mind were dropped because they were not represented in the documents that were analyzed. The subcategories used in the analysis were:

3.1 Character

This set of values is defined as the combination of qualities or features that distinguishes one person, group, or thing from another, such as honesty, integrity, kindness, fairness, and so on. For the purpose of this dissertation, values of character could be applied to people, such as particular employees of Telmex, or to the behavior of a telecommunications operator or regulatory entity as a unit. A unit was coded under character if the value referred to the way the employee, as an individual, or the telecommunications company is or ought to be.

This subcategory includes values such as:

- fairness (Having a disposition that is free of favoritism or bias; impartial. Consistent with rules, logic, or ethics).
- honesty (Quality of being upright in principle and action. Implies truthfulness, fairness in dealing with others, and refusal to engage in fraud, deceit, or dissembling).
• **honor** (Principled uprightness of character and a worthy adherence to a strict moral or ethical code).
• **integrity** (Moral soundness, especially as it is revealed in dealings that test steadfastness of purpose, responsibility, or trust).
• **loyalty** (Allegiance or faithfulness to a person, an ideal, a custom, a cause, or a duty).
• **trustworthiness** (worthy of reliance or trust).

3.2 **Action**

Values of action refer to the manner in which an actor or object is expected to perform. A unit was coded under this subcategory if it evaluated the activities performed by a telecommunications company, and the manner in which these activities were performed. Some of the values included were:

• **decisiveness** (determining or having the power to determine an outcome).
• **efficiency** (The capacity to bring about a result or a desired outcome. The ratio of the effective or useful output to the total input in any system).
• **lawfulness** (Acting within what it is established, sanctioned, or recognized by the law).
• **productivity** (Tending to bring about a particular effect or result; fertile, efficiency in achieving specified or useful results).
• **resolution** (Quality of being firmly motivated or determined to do or achieve something).
• **transparency** (Free from deceit; candid or open).

3.3 **Interaction**

These values refer to the manner in which an operator or regulatory entity is expected to perform when relating to others. A unit was coded under this subcategory if the action being evaluated mostly referred to the relationship between the consumer and the telephone company or its employees; that is, if the user evaluated the way he or she was treated by them. This subcategory included values such as:
• **accountability** (Liable to being called to account as of one's actions or of the discharge of a duty or trust; answerable to a responsibility or promise made to perform a particular task).
• **cooperation** (Joint work toward a common end; helpfulness).
• **empathy** (Identification with and understanding of another's situation, feelings, and motives).
• **politeness** (Well-mannered, respectful, and courteous acts to ease social interaction. Marked by or showing consideration for others, tact, and observance of accepted social usage).
• **power** (The ability or capacity to perform or act effectively. Strength or force exerted or capable of being exerted; might).
• **responsiveness** (Readily reacting to suggestions, influences, appeals, or efforts).
• **tolerance** (The capacity for or the practice of recognizing and respecting the beliefs or practices of others. The capacity to endure hardship or pain).

3.4 **Society**

This set of values includes those that are considered important for the social group in general, allowing society to prosper and improve. A unit was coded under this subcategory whenever it referred to a value or action that ought to or ought not to affect the population as a group; that is, whenever the value judgment was generalized beyond a particular individual through expressions such as "the users," "the citizens," "the country," "Mexico," et cetera. Some of the values considered under this subcategory were:

• **access to basic services**
• **freedom and ability to choose**
• **democracy** (participation, representativeness)
• **economic growth** (healthy marketplace)
• **equity** (The state, quality, or ideal of being just, impartial, and fair).
• **justice** (The upholding of what is just, especially fair treatment and due reward in accordance with honor, standards, or law).
• **security** (Freedom from risk or danger; safety).
• **sovereignty** (Supremacy of authority or rule as exercised by a sovereign or sovereign state. Complete independence and self-government)
• **stability** (Constancy of character or purpose; steadfastness. Reliability; dependability).
Use of Analytical Tools

To aid in the process of codification and retrieval of material, I used ATLAS.ti, a software package for qualitative data analysis. ATLAS.ti, an acronym for "Archiv für Technik, Lebenswelt und AlltagsSprache" (Archive for Technology, Living World and Everyday Language.Text Interpretation), was developed as part of an interdisciplinary project at the Technical University of Berlin from 1989 to 1992. ATLAS.ti is a tool for text interpretation that allows the researcher to organize and manage large amounts of material, as well as to retrieve and compare coded text, so that it facilitates the analysis and the establishment of meaningful connections among the data (Muhr, 1991). This software was selected for its ease of application and because it allows the creation of conceptual networks, a feature that was of great use in reconstructing the structure of public interest arguments.

Methodological Limitations

Limitations of employing consumer written complaints as data sources

It is necessary to point out that the use of written complaints as a source for data introduces certain limitations into the analysis of consumer expectations of service, needs, and values. Perhaps the most obvious bias is that consumer letters tend more frequently to report unsatisfactory experiences than satisfactory ones (Valle & Wallendorf, 1977). A second limitation pointed out by the literature on consumer complaints is that only a fraction of the total number of dissatisfied consumers actually
recurs to written complaints to express their dissatisfaction, making their letters a self-selected sample. Studies on consumer attitudes provide some insights on why the number of written complaints is so small.

Research on consumer expectations and satisfaction (Day, Grabicke, Shaetzle & Staubach, 1981; Hunt, 1991; Moyer, 1984; Singh, 1990; Warland, Herrmann & Willits, 1975) classifies consumers into satisfied and dissatisfied consumers. Yet, since not all dissatisfied consumers do something about their unsatisfactory experiences, this group is subdivided into "activists", that is, dissatisfied consumers that take action, and "non-action" dissatisfied consumers. The percentage of non-action consumers varies according to the type of product and service, with nondurable products and services having a higher percentage of inactive consumers than durable products and services do (Day et al., 1981, p. 89). Regardless of the type of product or service, the number of dissatisfied consumers that tends to take some action is usually higher than those who do nothing about it (Warland et al., 1975, pp. 152-3).

Some researchers consider that the difference between activists and non-action consumers stems from variances in the way in which each of these groups evaluate the magnitude of the loss caused by the unsatisfactory experience, as well as their assessments of the costs, benefits, and probabilities of success of their complaints. Other important factors are the consumer's access to information, his level of knowledge, and past complaining experiences (Day et al., 1981; Granbois, Summers, & Frazier, 1977; Singh, 1990; Warland et al. 1975). For the activists, the benefits of
complaining seem to surpass the costs; they have greater access to information and complaining experience, and thus, they tend to evaluate the probability of success much higher than the non-action consumers.

Demographic characteristics of the activists may also increase their propensity to take action in comparison to the non-action group. According to the literature, activists tend to have higher levels of income, social status, and education; they also have professional jobs, as well as greater involvement in formal organizations and political activities than the non-action group (Moyer, 1984; Singh, 1990; Warland et al., 1975, p. 153). By the same token, non-action consumers tend to be more financially pressed and to have little experience in complaining. Although results on gender are inconsistent across the literature, Granbois et al. (1977) and Moyer (1984) found out that women tend to complain more than men, but according to Moyer's findings the difference between genders is quite small (only two percentage points). In general, researchers have found that the influence of demographic factors on the decision to complain is relatively limited, particularly when compared to that exerted by factors such as predisposition, previous experience, and the cost-benefit evaluations mentioned above (Granbois et al., 1977, p.18; Singh, 1990, p. 92).

The number of dissatisfied consumers that end up writing complaints is further reduced by the availability of different potential actions that can be taken by the activists. Research on consumer complaining (Day et al., 1985; Hirschman, 1970; Hunt, 1991; Warland et al., 1975) points out several types of actions, which can be summarized into two: exit and voice.7 Albert Hirschman (1970) defines exit as the expression of consumer disappointment through the market. Consumers exit by leaving
the firm and shifting to a different product or service of equal or higher quality, thus affecting the revenues of the deteriorating firm. *Voice*, on the other hand, refers to the intent of consumers to exert change in the firm's performance without leaving it. This is achieved by alerting the firm of its deteriorating performance through complaints in which consumers express their dissatisfaction with the product or service directly to the firm's management, to an authority to whom the firm is accountable, or as Hirschman states "to anyone who cares to listen" (p. 4). In this sense, Hirschman underscores, "voice is nothing but a basic portion and function of any political system, known sometimes also as 'interest articulation'" (p. 30, emphasis added).

As in the case of the decision between action or inaction, the decision between using voice, exiting, or using a combination of these actions depends on several factors. Among them, Hirschman points out the structure of the market (competitive, monopoly, oligopoly, or monopolistic competition), the availability of substitute products, the consumers' quality elasticity of demand, the relative effectiveness of voice, the relative cost of exit and voice, and the degree of loyalty towards the product or firm. As a result, from all the available choices of action, those consumers who decide to express voice by complaining to the manufacturer, to government, or to the mass media are only a relatively small proportion of the total dissatisfied consumers. According to Williams (1996), "people will not generally make a written complaint until they have built up a certain 'head of steam' about whatever has annoyed them" (p.20).

Because of the propensity of consumers with lower levels of income and education to not act upon their unsatisfactory experiences, they tend to be underrepresented among the complaints received by service providers, manufacturers,
and government agencies. In this sense, Warland et al. (1975) conclude that "the volume of complaints received by business and government cannot be regarded as a true measure of consumer dissatisfaction. A significant number of consumers who get upset do nothing or take actions which are not overt" (p. 161). Although limited research has been done on developing countries, Day et al. (1981) point out that the level of non-complainants tends to increase with lower living standards. The limited availability of goods and services in developing countries, relative to that in developed ones, make consumers in these countries more prone to accept lower levels of quality without triggering complaints (Day et al., 1981, p. 100). Thus, it is expected that the number of non-complainants in Mexico should be higher than in developed countries.

Finally, it is important to point out that, notwithstanding all the differences between activists and non-action dissatisfied consumers, researchers (Moyer, 1984; Warland et al., 1975) have found that action and non-action groups have similar perceptions of the needs and problems facing consumers. Warland et al. (1975) for instance, point out that both groups "are more likely to believe consumers need more protection and are more negative about business than the Not Upset group" (p.155). This finding is particularly important for the present dissertation. It underscores that, even when the number of consumers that express dissatisfaction through written complaints is limited and not necessarily representative of the demographic characteristics of the entire population of dissatisfied consumers, the written complaints of activists still provide a good proxy to the concerns, needs, and values of non-action consumers.
Other limitations

Argumentative methods can be useful tools in the analysis of policy definitions; in the particular case of this dissertation project, they can shed light on the changes that definitions of public interest, as well as the values embedded in them, have undergone over time. Yet, because of the intense focus of argumentative analysis on the structure and rationality of the arguments put forward by social actors, researchers tend to ignore or at least bracket issues of power relations among the actors involved in the argumentation process. In this dissertation, the mere nature of the texts that were selected for the documentary analysis brought issues of power into the analysis. From the point of view of the consumers, issues of power inequalities played an important role in the discourse of the public and of their experience with telecommunications providers.

It is also important to point out that the intensive nature of the case study approach and the culturally embedded nature of the arguments analyzed limit the generalizability of the concrete patterns discovered in the documents to other situations (Sayer, 1992). Nevertheless, it is possible that some of the findings might be applicable to other countries where the economic, political, and social institutions resemble those of Mexico.
Endnotes

1  OECD reports a 2.2 percent growth rate between 1996 and 1997 (OECD, 1999c, July, p. 7).

2  For examples of the increased preoccupation of state and federal agencies in the United States with consumer concerns and the activities of consumer education and protection see Rowe (2000) and Powell (2001).

3  An exception to this rule were some of the letters published in 1994 and 1995, when the number of complaints received against Telmex increased substantially. During these two years the coordinator of the column summarized the content of the letters to just a few lines, keeping some of the language used by the public, in order to publish as many as possible in a single day.

4  Perelman and Olbrechts-Tyteca's (1969) propose another type of inferential strategies or schemes used by arguers to make connections between premises and claims. Warnick and Kline (1992) point out that when using schemes, arguers invoke strategies or inference forms of association or dissociation of ideas that are recognized and accepted by their audiences. Thus, the analysis of schemes can provide insights on the system of shared values and beliefs on which these schemes are based and on which the success of their persuasive intent depends. Warnick and Kline (1992) state that it is the recognizability of the forms themselves that gives arguments their persuasive force. The persuasive power of arguments, then, arises from these inference forms, as well as from the recognized liaisons, hierarchies, and loci of the preferable. . . .Schemes are able to function persuasively because of the arguer's and the audience's mutual participation in a common culture. (p. 3)

5  The pilot study was conducted using data representative of two different periods: (a) Telmex's private monopoly and (b) the competitive period. The years selected for the pilot were 1993 and 1997. The pilot study allowed the researcher to verify that the consumer letters actually included implicit or explicit references to the concept of public interest and that such references were linked to value structures. The coding yielded 21 different themes that were refined later during the intercoder reliability process.
According to Rokeach, instrumental values prescribe modes of conduct that allow a person to fulfill other values; as such, they can be considered as means to an end. Terminal values, on the other hand, refer to end states of existence that are considered desirable.

Day et al. (1981) define the range of responses in a more detailed manner, going from "does nothing" to boycotts, from seeking redress from the seller, manufacturer, or a third party to private and public complaints. Hunt (1991) adds retaliation to Hirschman's voice and exit options.

Quality deterioration is considered an equivalent to an increase in price. Hirschman (1970) points out that the effect of such change in quality is perceived differently by different consumers, depending on their appreciation of the quality of the product and on the losses inflicted by the change in quality/price on each consumer. According to Hirschman, consumers who are highly sensitive to an increase in prices tend to be less sensitive to declines in quality and vice versa. Hence, the consumers who drop out because of an increase in price are different from those who exit because of quality deterioration. Quality-conscious consumers with considerable consumer surplus are often likely to lose more when there is a decline in quality, making them more prone to use exit or voice to express dissatisfaction (pp. 48-49; see also Appendix C in Hirschman, 1970).
CHAPTER 4

INSTITUTIONAL REFORM IN THE
MEXICAN TELECOMMUNICATION SYSTEM

Introduction

In December of 1990 Teléfonos de Mexico (Telmex), the Mexican public telecommunications operator, was partially privatized, opening a new phase in the history of telecommunications in Mexico. The privatization marked not only a shift in ownership and control, but also the beginning of a slow process towards the establishment of a competitive telecommunications market in the country. The privatization was also seen as a means to propel the modernization and expansion of the country's limited telecommunications network. At the time of the privatization, the distribution of telephone service was disproportionately skewed toward the nation's three main metropolitan areas, Mexico City, Guadalajara, and Monterrey, and more than 10,000 rural communities with under 500 inhabitants had no access to telephone service (Petrazzini, 1993, p. 179).

In December 1989, Telmex had 5 million lines in service, with 7,340 cities served. It was considered the second most important national enterprise of the country, just after the state-owned oil company Pemex, and the third biggest company in Mexico (Teléfonos de México [Telmex], 1990, p.13). Nevertheless, the telephone density of the
country was extremely low: 5 lines for 100 inhabitants, that is, only 18 percent of the households were connected. One and a half million applications for service were pending, and only 40 thousand pay phones served a population of over 84 million inhabitants (Secretaría de Comunicaciones y Transportes [SCT], 1991, p. 9).

The Mexican government granted the new owners a monopoly over national and international long distance telecommunications for six years, until August of 1996. In exchange for the interim monopoly status, Teléfonos de México had to fulfill a series of network expansion and quality of service goals that were established in the revised Concession Title for the privatized company. Telmex was also expected to modernize the network for the competition era, as well as to eliminate the cross-subsidies that had kept local telephony rates below cost and long distance rates high. During these six years the government focused on establishing a regulatory framework to facilitate the introduction of competition in the different telecommunications markets and created a regulatory agency to oversee its implementation. Ironically, delays in issuing new rules and revising old ones actually impeded competition from flourishing in markets where Telmex did not have a de jure monopoly, such as local telephony and payphones, as is discussed below.

The purpose of this chapter is to describe the process of institutional reform in the Mexican telecommunications system that took place from the time of Telmex's privatization until May of 2002. This historical review intends to clarify the rationales behind these reforms and the goals that the government and the industry aimed to advance through them. The review also provides information on the historical and current relationships between the different actors involved in the sector, mainly, the
government, Telmex, and the new competitors. Such rationales, goals, and relations are expressed directly or indirectly to the public in public speeches, through the companies' advertisement, or through other media, and become part of the stock of knowledge that the public may use to evaluate the industry's performance and the success of the government in protecting the public interest. In this sense, it is expected that some of the discourse used in justifying and implementing the reforms of the sector will come out in the letters sent by consumers. Similarly, it is expected that the consumers will make references to the relationships between the companies and the government and how these relationships affect performance and the public interest.

This chapter is divided into two sections. The first section presents a brief history of the telecommunications system in Mexico, emphasizing the period of government ownership that led to Telmex's privatization. The second section addresses the development and current status of the process of institutional reform in the telecommunications sector.

**Brief history of the Mexican telecommunications system: 1878 - 1990**

The history of the telecommunications system in Mexico is marked by a series of transitions in which the economic and political circumstances of the period influenced changes in ownership. Over 100 years after the first telephone line was installed in Mexico, the Mexican telecommunications system came full circle in terms of ownership when control over the network returned to a mixture of private national and foreign capital in 1990, after passing through a period of increased Mexicanization and later, a period of government ownership. Table 4.1 summarizes important events in
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1878</td>
<td>Telephony is introduced in Mexico</td>
</tr>
<tr>
<td>1882</td>
<td>Compañía Telefónica Mexicana, S.A. (later Compañía Telefónica y Telegráﬁca Mexicana or Mextelco) is created, with the technical and ﬁnancial support of Western Electric Telephone Co of the United States</td>
</tr>
<tr>
<td>1905</td>
<td>L. M. Ericsson &amp; Co. from Sweden obtains a license to provide services in Mexico City and creates the Empresa de Teléfonos Ericsson in 1907</td>
</tr>
<tr>
<td>1910-1924</td>
<td>Mextelco's lines are expropriated during the revolutionary war. Ericsson claims 53% of the national telephone market</td>
</tr>
<tr>
<td>1925</td>
<td>The government sells Mextelco to International Telephone and Telegraph (US), granting it a 50 year license for local and long-distance telephone services</td>
</tr>
<tr>
<td>1926</td>
<td>Ericsson is granted a license for long-distance services</td>
</tr>
<tr>
<td>1932</td>
<td>The Law of General Means of Communication (Ley de Vías Generales de Comunicación) is issued. This Law and the Political Constitution of the Mexican United States constitute the basis for the current telecommunications legislation</td>
</tr>
<tr>
<td>1940's</td>
<td>An emergency decree requires majority Mexican ownership of companies, beginning a process of nationalization. Ericsson's controlling interest is sold to a Mexican company</td>
</tr>
<tr>
<td>1947</td>
<td>Empresa de Teléfonos Ericsson is transformed into Teléfonos de México S.A. de C.V. (Telmex)</td>
</tr>
<tr>
<td>1950</td>
<td>Mextelco agrees to merge with Telmex making the latter the largest telephone company in Mexico</td>
</tr>
<tr>
<td>1958</td>
<td>A group of Mexican entrepreneurs acquires the majority of Telmex's shares from ITT &amp; Ericsson</td>
</tr>
<tr>
<td>1950s</td>
<td>The microwave system, measured service, and coin payphones are introduced.</td>
</tr>
<tr>
<td>1960s</td>
<td>A national numbering system is established, enabling direct dialing long distance service (LADA)</td>
</tr>
<tr>
<td>1972</td>
<td>Teléfonos de México comes under government control</td>
</tr>
</tbody>
</table>

Table 4.1: Early History of the Mexican Telecommunications Industry (1878 - 1972).
the early history of the telecommunications system in Mexico, from its beginnings up to the period of government control over Telmex.\textsuperscript{1} The level of performance and expansion of the network achieved during the period of government ownership strongly influenced the decision to privatize Telmex and engage in a process of institutional reform for the sector. For this reason, the events that transpired during this period are discussed in greater depth below.

**The era of state monopolization**

In 1972, the Mexican government gained control over Teléfonos de México by controlling the majority of an exclusive "AA" voting stock, which represented 51 percent of the company's total equity. As a result, the government obtained the majority of seats on the board of directors, and the Minister of the Secretariat of Communications and Transport (Secretaría de Comunicaciones y Transportes, SCT) served as chairman, establishing, among other things, the policies, technical standards, investment plans, and service rates for the sector (Petrazzini, 1993). Private capital, however, remained an important part of the company, both in terms of ownership and management, since Mexican nationals and foreigners controlled the remaining 49 percent of shares, called "A".

During this period the Mexican telecommunications systems was modernized and expanded. National and international long distance services were extended to almost all states, and telephone traffic was centralized through Mexico City. Telmex entered into telecommunication-related publishing, real estate, construction activities, and radiotelephony. Microwave transmissions began on a network leased from the
SCT; digital systems began being incorporated into the network and the national satellites Morelos I and II, not owned or operated by Telmex, were used for long-distance communication (Comisión Federal de Telecomunicaciones [Cofetel], 2001a).

Although rates for local service, particularly those for residential customers, were maintained at low levels during the 70s, the economic crisis that affected the country during the 80s resulted in increases in rates for all services, as well as in telephone taxes. According to Petrazzini (1993, p.180), taxes on local telephony rose from 69.64 percent of the rate in 1980 to 90.48 by 1989. During the crisis Telmex remained profitable, but internal funds were inadequate to sustain further expansion. The company obtained loans from international financial institutions, but its ability to borrow from abroad was also affected by the Mexican debt crisis. As a result, capital investment in the public network slowed and growth decreased from an average of 12.8 percent in the 1970s, to 6 percent in the 1980s (Petrazzini, 1993, p. 181). The low level of investment was also a result of the transfer of revenue from Telmex to the general government fund, of which Telmex generated more than one percent of the total revenues (Kim, 1992, p. 88). According to Ramamurti (1993), of every 100 pesos that went to Telmex in 1989, "60 went to the government in telephone and value-added taxes" (p. 53).

While the available financial resources decreased during the 80s, Telmex's workforce kept expanding at a rate of 8 percent per annum from 1984 to 1988. Yet, the number of new lines grew only at 5 to 6 percent per annum (Ramamurti, 1993, p. 54). The level of deployment achieved during the period was also affected by natural phenomena, such as floods and the 1985 earthquake in Mexico City. The latter, for
example, destroyed the tandem equipment connecting all the switches that were
centralized in the city, and affected the provision of long distance and special services
(Cofetel, 2001a).

The strain created by the economic crisis, together with external pressures from
financial institutions, such as the International Monetary Fund, and the coming of a new
group of policymakers into power, such as Carlos Salinas de Gortari (President De la
Madrid's Secretary of Planning and Budget, and from 1988 to 1994, President himself)
facilitated the shift from nationalistic policies to ones that supported liberalization. The
government began a process of institutional reform, with the telecommunications sector
as a flagship. The announcement of the plan to privatize Telmex was used as a symbol
of the government's intention to liberalize the economy and of the State's openness to
foreign and national private investment.

The privatization of Telmex

From the beginning, the Salinas administration adopted liberalization policies
and oriented the Mexican economy outward. The liberal shift was reflected in
presidential rhetoric. For Salinas, affirmation of Mexican sovereignty was only
possible through modernization of the infrastructure and integration into the global
economy.

During his 1987 electoral campaign, Salinas announced the need to promote a
faster-paced growth of Teléfonos de México as a part of his economic strategy to
modernize the country (Telmex, 1991). He stated that "telecommunications [would]
become the cornerstone of [the] program to modernize Mexico's economy" (cited in
Székely, 1989, p.81). Ramamurti (1994) attributes the selection of Telmex as one of the first state enterprises to be made available for foreign investment to three factors. First, Telmex was a big, profitable company, with enormous growth potential. Therefore, its privatization would receive international attention. Second, the privatization could be effected quickly, because under the constitution telephone services were not reserved to the Government or to Mexicans as was the case with the oil industry, and thus no legislative changes were required. Third, Salinas' participation in Telmex's board of directors during the De la Madrid administration provided him with firsthand knowledge of the company.

Salinas announced the decision to privatize Telmex in September of 1989, on grounds of inefficiencies and slow growth caused by lack of resources (Salinas, 1990, pp. 2-3). Salinas stated that the privatization of Telmex should fulfill the following requirements: (1) guarantee government oversight over telecommunications, (2) improve quality of service, (3) guarantee employees' rights under the Modernization agreement signed by Telmex and the Union in April of 1989, and give them equity participation in the company, (4) expand the telephone system, (5) engage in research and development to strengthen Mexican sovereignty, and (6) keep Telmex under Mexican majority control (Salinas, 1990, pp. 3-4). In order to prepare Telmex for privatization and to fulfill the requirements established by President Salinas, a series of organizational, financial, and regulatory changes were initiated. Organizationally, the Secretariat of Finance took over as chairman of Telmex's board, replacing the Secretariat of Communications in this role.
Two financial measures adopted by Telmex in anticipation of the sale deserve attention. First, Telmex changed its pricing structure as part of a gradual plan to eliminate cross-subsidies and distortions. Rate rebalancing began in early 1990, when international long-distance rates were cut by 40 percent, local long-distance rates were raised by as much as 100 percent, and local calls above a specified monthly minimum became subject to charge (Mexico Service, June 1990, p. 6). The end result was a 126.54 percent profit increase for Telmex in 1990 (Petrazzini, 1993, p.194). These rate changes increased Telmex's revenues per line, making it more attractive to prospective foreign and domestic buyers. At the same time, the government eliminated the telephone sales tax. Telmex now had to pay 29 percent of its net profits in taxes; this payment, however, could be avoided by reinvestment. According to a World Bank report, this price-cum-tax reform increased the then current value of Telmex by US $15 billion (Ramamurti, 1994, p. 7).

The second financial measure was that Telmex modified its capital structure. This change was required to reduce the amount of shares necessary to acquire effective control over the company. At the beginning of 1990, the government owned 56 percent of Telmex's total equity, representing the totality of Telmex's AA shares, while the remaining 44 percent was owned by domestic and foreign private investors in the form of A shares. Telmex's capital was increased by means of a stock dividend with the creation of a new type of shares called "L" shares with limited voting capabilities. In this way, the 51 percent of the equity formerly held by the government in the form of
AA shares was reduced to 20.4 percent of the new total equity. The government later sold the rest of its stock in three different offers, so that by 1994 it retained only less than 1 percent of the stock.

The government shares were open to acquisition solely by Mexicans. Nevertheless, it was permitted for Mexican groups to collaborate with foreign investors and form trusts with at least 51 percent Mexican ownership. Mexican-controlled trusts were allowed to bid for the shares representing the government's controlling interest (Ramamurti, 1993, p. 59). To attract foreign investors, despite these significant ownership and voting limitations, the government eliminated income tax on dividends and capital gains and restrictions on the repatriation of profits and capital (Ramamurti, 1993, p. 59). In fulfillment of President Salinas' promise to Telmex's employees, they were granted 4.4 percent of the company's shares.

This period was also marked by several legislative changes. A new regulation for telecommunications called Reglamento a la Ley de Vías Generales de Comunicación (Regulation on the Law for General Means of Communication; Reglamento herein) was issued in October of 1990, and Telmex's Concession Title— the license where the terms and conditions of the company's monopoly status were specified—was revised and approved in December of that year. The new Reglamento established a regulatory framework for all telecommunications businesses in Mexico, defining the rules for the establishment, maintenance, and operation of telecommunication networks, and for the provision of services. It also specified the services requiring licenses or permits and established rules for tariff-setting and sanctions (SCT, 1990a). It opened competition in the terminal equipment market,
value-added services, and mobile telephony, allowing the government to regulate new technologies not specified in the Law for General Means of Communication; it maintained government oversight of the telecommunications sector, and retained exclusive state ownership of telegraph and satellite systems.

As for the Concession Title, SCT stated that it was revised to ensure "technological development, to ensure that Telmex fulfills its commitments of expansion, quality, and pricing for its services, as well as to promote equal competition with other telecommunication enterprises, so that it favors improvements in the services demanded by the subscribers" (SCT, 1990b, p. 15). Telmex's Concession Title, as modified by SCT, retained the administration and control of the company for Mexican citizens, but allowed foreign enterprises to participate as minority shareholders.

Telmex was granted a license to provide telecommunication services until 2026 and was given monopoly status on national and international long-distance services until August of 1996. Competition in this sector would begin in January of 1997. Rural radiotelephony services were also included as part of the monopoly of Telmex. Local and payphone services were opened to competition, but no license was granted during the monopoly period. The Concession allowed Telmex to participate in the provision of mobile and personal communication services (PCS) in a competitive environment; it required Telmex to allow interconnection to future competitors, and to implement a price cap rate system. More importantly, in the Title, the government also established a set of specific performance criteria for network expansion and quality of service that Telmex was required to fulfill by specific deadlines during the following 5 years (see
Fulfilling the performance goals set in the Title required a strong financial and technical commitment from the new owners of Telmex, particularly when compared to the growth achieved by the company during the late 80s. It is important to point out that Telmex's staff participated in the elaboration of the Concession Title, which may have introduced biases in the establishment of performance criteria. This fact, however, does not diminish the value of the Concession Title and its criteria as a binding commitment and a clearer regulatory basis that allowed the new owners to know in advance what was expected from them on a short and medium term basis.

The legal, financial, and organizational changes mentioned above constituted the first steps in the process of institutional reform in the telecommunication sector that is still in process. They cleared the way for the transfer of control over Telmex, on December 13, 1990, to a trust comprising the Mexican conglomerate Grupo Carso (a mining, manufacturing, and tobacco concern headed by Carlos Slim Helú) and two foreign telephone companies, the US regional telephone holding company Southwestern Bell International Holdings (SBC) and France Cables et Radio, a subsidiary of France Telecom Inc., the government owned monopoly. This sale, as stated above, closed a circle in terms of ownership, but opened a new era for the Mexican telecommunications sector in terms of regulation, new participants, technology, and services. In the following section I discuss the implementation of institutional reform during the period
<table>
<thead>
<tr>
<th>EXPANSION GOALS</th>
<th>Results</th>
<th>QUALITY GOALS</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expansion of basic telephone service lines by a minimum annual rate of 12% until 1994</td>
<td>Target met until 1993</td>
<td>Decrease in percentage of line failure from 10 percent in 1990 to 5 percent by 1994</td>
<td>Not met on time. 2.8% in 1998</td>
</tr>
<tr>
<td>Increase penetration of payphones from 0.5 to 2 per 1,000 inhabitants by December of 1994, and to 5 payphones per 1,000 inhabitants no later than December of 1998</td>
<td>1994 target surpassed. Reached 9.4 payphones per 1,000 in 1999</td>
<td>Maximum waiting time for basic service line to be a maximum of 6 months by 1995; by 2000, the waiting period was to be reduced to a month</td>
<td>By the end of 1997, waiting period was less than a month</td>
</tr>
<tr>
<td>Telmex is required to set new rural telephony expansion plans in collaboration with SCT every four years</td>
<td>Requirement fulfilled</td>
<td>92 percent of lines repaired within 3 days by 1994</td>
<td>By 1998 only a 94% level was achieved</td>
</tr>
<tr>
<td>Supply rural telephone service—through at least a single payphone or long distance booth—to 10,000 towns with more than 500 inhabitants by December 1994</td>
<td>Target met on time</td>
<td>Increase in the percentage of calls answered by an operator in less than 10 seconds of the first ring from 90 percent in 1991 to 92 percent by 1994</td>
<td>Not met on time; by 1998, only a 92.6% level was achieved</td>
</tr>
<tr>
<td>Commitment to introduce technological advancements to diversify services, improve quality, and reduce costs</td>
<td>New technology and services introduced</td>
<td>50 percent of faulty lines repaired on the same day by 1994</td>
<td>45% in 1990 increased to 80.4% in 1998</td>
</tr>
<tr>
<td>By 1994 at least 50 percent of the local exchange and 65 percent of long distance exchanges should become digital.</td>
<td>80.37% of lines were digitized by 1994. 99.6% of local and 100% of L.D. digitized by end of 1999</td>
<td>Implementation of verifiable, quantifiable and internationally comparable quality control and efficiency indicators</td>
<td>SCT established quality indexes, but non-compliance is difficult to test*</td>
</tr>
<tr>
<td>Digitalization of 8,500 kms. of the microwave network.</td>
<td>Microwave long distance network replaced with fiber optic lines</td>
<td>Engagement in industrial and technological research to increase Telmex's and Mexico's competitiveness in telecommunications and foster Mexico's self-sufficiency in these services</td>
<td>Done through Telmex Lab with support from MIT</td>
</tr>
<tr>
<td>Installation of 3,000 kms. of fiber optic cable, and of a network of 14 stations for satellite communication</td>
<td>Done</td>
<td>Commitment to train Telmex's personnel to support the company's modernization process</td>
<td>Training center established in 1991</td>
</tr>
</tbody>
</table>

Source: Caso Lombardo (1990); *OECD (1999b); SCT (1990b); SCT (1991); Telmex (1993, June; 2000a).

Table 4.2: Telmex's Concession Title Performance Criteria and Achievements
of Telmex's private monopoly. This was a challenging period for all those involved with the reform process, as it involved establishing the bases for competition in the long distance, payphones, and fixed and wireless local service markets.

Institutional reform after privatization: The fight to develop a leveled playing field

Once the privatization process came to an end, it was time to develop the conditions that would allow the successful implementation of the Concession Title's goals, as well as the achievement of longer-term goals, such as universal service and the development of a fully competitive telecommunication sector. To this end, the process of institutional reform continued after Telmex's privatization in three critical areas: (a) the organizational reform of Telmex, (b) the establishment of regulation and a regulatory authority, and (c) the introduction of competition. In this section, I describe the manner in which these three components of institutional reform were implemented in the Mexican telecommunications market. The results of these reform processes in the performance of the system in terms of connectivity, quality of service, affordability, innovation, and choice are discussed in Chapter 5.

A) The organizational reform of Telmex

The reforms that facilitated Telmex's sale were followed with others taken by the new management as part of their corporate strategy to prepare Telmex for the incoming competitive environment and to expand the market opportunities available to
the company. To this end, management made a series of changes in the organization of
the incumbent operator\textsuperscript{6} that have continued until this day, as a response to the rapidly
changing telecommunications and economic environment.

In contrast to other Latin-American telecommunications operators that were
privatized during this period, such as Entel in Argentina, Telebras in Brazil, and CTC in
Chile, the reorganization of Telmex did not envision the structural separation of the
operator into regional operators or separating the company's long-distance and local
operations. To make the company more attractive and financially valuable, Telmex was
sold as a single unit, allowing it to maintain and even strengthen its market power
during the monopoly period.\textsuperscript{7}

Although Telmex's structure remained intact, the new management rapidly
began modifying its internal organization in order to transform Telmex into an efficient
and modern company able to thrive in a competitive environment. To this end, during
the 1990s Telmex engaged in changes in four strategic areas: (1) modernization and
extension of the network in accordance with the Concession Title, (2) development of
human resources and advancement of R&D activities, (3) administrative reorganization,
and (4) establishment of strategic alliances and international expansion. It is important
to point out that these are not isolated changes, but interdependent strategies. They are
part and parcel of the company's response to the different stakeholders involved in the
telecommunications market (regulators, competitors, shareholders, employees, suppliers
and consumers), as well as to the, at times, competing goals of fulfilling the
requirements of its revised license while improving its profitability and strengthening its
competitive advantages.\textsuperscript{8}
The following sections address Telmex's strategies in each of the four areas mentioned above. These strategies cut through different levels of planning, from broad corporate goals, such as increasing profitability and promoting growth, to business strategies, such as the introduction of new services, entry into new markets at the national and international levels, to functional decisions regarding the introduction of new technologies, the training of personnel, and making management more efficient.

A.1. Modernization and Network Extension

The corporate goal of modernizing the external network required functional decisions regarding technology, particularly the substitution of digital for electromechanical and analog switches that had become obsolete. By 1995, the three major cities in the country were 100 percent digital (Telmex, 2001a), and by the end of 1999, 100 percent of the long distance network and 99.6 percent of the local network were digitized (Telmex, 2000a, p. 9). Digitalization improved the quality, speed, and reliability of service and also allowed Telmex to provide new value-added services, such as third party calls, caller ID, and call waiting beginning in 1995 (Telmex, 1996, p. 11). To improve its service, Telmex expanded the capacity of its operator and failure report services and introduced automatic systems in 360 customer service offices (Telmex, 2001a).

As part of its modernization strategy, Telmex also established an intelligent network supported by protocols such as SDH (Synchronous Digital Hierarchy), ATM (Asynchronous Transfer Mode) and CCSS-7 (Common Channel Signaling System No. 7) that allow high speed packet data transmission and the provision of advanced
telecommunication services, two profitable new markets (Telmex, 2001a). Similarly, in fulfillment of the Concession Title requirements, in 1991 Telmex began the installation of a national fiber optic network that now constitutes the backbone of its long distance network, linking 98.5 percent of the population through nearly 50 thousand kilometers of cable (Telmex, 2000a). Telmex has also taken advantage of the expertise of its foreign owners. France Telecom's expertise in fiber optics, for instance, helped reduce the cost of the cable-laying process by 48 percent. France Telecom's methods and procedures for studying demand and planned network expansion were also implemented (Blears, 1994, p.19).

From 1991 to 1998, Telmex invested more than US$17 billion dollars in the modernization and expansion of its network (Telmex, 2000a, p.8), including US $6.8 billion during the first three years of operation (1991-1993) as a privatized firm, which represented about US$24 per capita. This high level of investment was impacted by the economic crisis triggered by the peso devaluation on December 20, 1994. Telmex's economic growth slowed down and investment was reduced, so that by 1997 it represented only US$10 per capita, a below average level of investment when compared to other OECD countries (Organisation for Economic Co-operation and Development [OECD], 1999b, p. 289). Since most of the requirements of the concession were met by 1994, Telmex explained that "it [was] not necessary to continue investing [for such purposes]. Investment [would] hence be directed mainly by economic and market considerations . . . [with] more investment in systems and necessary support for the introduction of new services" (Langfield, 1995).
The devaluation had mixed effects on Telmex. On the one hand, Telmex lost about US $760 million (4.4 billion new pesos at the January 1995 conversion rate), just because of foreign exchange; its foreign currency debt, which at the end of 1994 reached US $2.05 billion, was boosted (Collier, 1995, p. D14). On the other hand, the revenue for long-distance calls—about 27 percent of the company's revenue at the time—, which was paid in stronger dollars, increased Telmex's income for this service by 24.1 percent in 1995 compared to 1994 (Telmex, 1996, p. 16). Notwithstanding these difficult times, Telmex has remained among the most important telecommunications companies worldwide. As of 1999, it was ranked 19th among the largest public telecommunications operators in the OECD area, with reported revenues of US$10,075 million, and 24th among mobile telecommunications operators (OECD, 2001, pp.18, 21).

A.2. Human Resources

As for its human resources, Telmex achieved productivity improvements, reducing the number of employees relative to telephone lines. Since one of the conditions for privatization was to maintain the work force existing in 1989, productivity increments could only be obtained by stopping the growth of the work force—which was an average of 8 percent per year during the 1980s (Ramamurti, 1994, p.10)—and through voluntary retirement programs. As a result, the number of employees per 1,000 lines decreased from 9.6 in 1990 to 6.6 in 1993 (Telmex, 1994).
Employment levels, however, increased in 1995 and 1996 as the company prepared the network for interconnection with the new competitors, and as a consequence of approximately 20 percent annual rate growth in radiotelephony services (paging, cellular, and beepers) during these years (OECD, 1999b; Telmex, 1997). According to an OECD study, from 1990 to 1997, Telmex's employment rate increased 12 percent (OECD, 1999b, p. 289). In fulfillment of the training requirements established in the Concession Title, Telmex established the technological institute Inttelmex in 1991 to transfer technological knowledge from its technological partners and train its personnel in areas of customer service, information systems, and new technologies.

A.3. Administrative Reorganization

As part of its internal reorganization, Telmex has also modified its administrative structure to improve efficiency and better attend to the needs of particular regions of the country. At the end of 1995, the commercial and operational activities of the company were decentralized with the establishment of 10 new divisional centers, 3 for Mexico City and 7 in the rest of the country.

Other functional decisions made to promote optimization and short-term profits were the deployment of assets, changes in inventory management and purchasing decisions, and reductions in costs of purchasing technology for expansion. For example, Telmex decided not to buy units of inventory that appeared to be overstocked;
it eliminated bottlenecks in long-distance traffic during peak hours through rerouting, and incremented the number of providers competing for contracts to obtain better terms and prices (Newell, 1992, p. 24).

More recently, Telmex engaged in new restructurizations. In April of 2000, France Telecom exchanged its "AA" stock with full voting rights to "L" shares with limited rights, to gain more liquidity, limiting its relationship with Telmex to the area of international partnerships. SBC Communications remains as a full voting partner (Telmex, 2000b). Yet, a more dramatic structural change took place in September of 2000, when Telmex's growing wireless division, Telcel, and the international operations of Telmex were spun off into an independent company called America Móvil, leaving wireline services, including Internet and data services, under Telmex's supervision. This excision was intended to provide the new company with sufficient capital, its own stock (AMX, listed in the NYSE), and a low level of debt to allow it to grow at a faster pace. With 10.5 million subscribers, America Móvil is considered the largest mobile operator in Latin America, followed by US BellSouth Corporation (Duffy, 2001a; Guthrie, 2001).

According to a report to its shareholders (Telmex, 2001b), Telmex will see its liquidity reduced and its debt increased as a result of the separation. After the spin-off, Telmex's stock has been closely competing with America Móvil as the most popular stock in the Mexican stock exchange, and the latter has seen high volumes of trade in the New York Stock Exchange. Although Telmex's financial results for the fourth quarter of 2000 were positive, with a revenue growth of 7.5 percent (Duffy, 2001a), the long-term effects of the excision on Telmex's finances are still uncertain.
A.4. International Expansion

The creation of America Móvil is closely related to Telmex's fourth strategic area: its international operations. As part of its 20/20 plan for the years 1999-2000, Telmex gave emphasis to the promotion of international ventures. After a period of dispute with the Federal Communications Commission (FCC) of the United States about the openness of the Mexican telecommunications market, Telmex finally obtained approval to operate in the United States in 1999. The company has focused its activities in the US on the Hispanic market, providing pre-paid wireless and wireline services through Topp Telecom Inc, and Comm South, respectively. In 1999, Telmex also established a strategic alliance with Williams Communications Group to interconnect their fiber optic networks for the provision of long distance and multimedia services between Mexico and the United States (Telmex, 2000a, p. 11).

At the same time, the company has expanded its Latin-American interests, having recently gained stakes in wireline and wireless operators in countries such as Guatemala, Puerto Rico, the Virgin Islands, and Ecuador. More recently, through Telecom Americas--a joint venture between America Móvil (44%), SBC (12%), and Bell Canada International Inc (44%)--Telmex is targeting the wireless market in Brazil and Venezuela to provide local and long distance services (Guthrie, 2001; Senaratna, 2001; "Telecom Americas", 2001; Telmex, 2000a).
The international ventures are not limited to local and long-distance services. In cooperation with Microsoft, in October of 1999 Telmex established an Internet portal called T1msn, to provide information, local content and e-commerce to all Latin America, and acquired 19 percent of Prodigy Communications Corporation to support its Internet service in Mexico (Telmex, 1998, 2000a).

In sum, Telmex's internal reorganization in the areas of network expansion, human resources, administrative structure, and international ventures may be seen as a corporate response to the challenges imposed by the Concession Title, the devaluation of the peso in 1994 and, more recently, by the threat of new competitors. All these changes have tended to strengthen the position of the company in the national and international telecommunications markets, but at the same time have put the company at the center of legal battle against national and international competitors, as well as against regulatory authorities within and beyond the Mexican borders, as is discussed below.

**B) Establishment of regulation**

A second element in the process of institutional reform of the Mexican telecommunications systems was the establishment of a regulatory framework adequate to respond to the current and future changes in the market. As discussed above, the revision of Telmex's Concession Title and the creation of the *Reglamento* were the first stepping stones in the process of regulatory reform. In conjunction with the 1932 *Law*, these documents constituted the main regulatory framework during the first years of the private monopoly. Even when there was a need to develop the legal framework that
would support the entry of competition in 1997, the Mexican government seemed to hold back its regulatory function during the first few years of Telmex's private monopoly.

Although there is not a clear-cut explanation for the government's inaction, it might have been the result of several interacting factors. In the first place, the goals for the first four years after the privatization of Telmex were already set in its revised Concession Title, so it may have been perceived that no immediate regulatory action was needed during this period. As a result, the state tended to focus its attention on supervision and enforcement. A second factor was that the type of regulation needed for the competitive period required substantial changes to the existing legal framework, demanding the participation of other branches of government and a more complex legal process than was required for issuing the Reglamento. A third, less transparent factor, was the close relationship between President Salinas and Carlos Slim, president of Grupo Carso, which might have been a factor in the slow speed of regulatory decisions, to the benefit of Telmex.9 As a consequence of these factors, the first four years of the private monopoly provided Telmex enough breathing room to fulfill its obligations without changes in the regulatory status quo.

For certain, the calmed regulatory period of the first years of the monopoly was followed by a frenzy of new legislation during the last three years of Telmex's exclusivity and even beyond them, as the Ministry began prioritizing the establishment of a clear regulatory environment in which competition could prosper. The economic crisis of 1994 might also have provided an added incentive to create rules that would attract new financial resources into the market. From 1994 to 1998 a new
Telecommunications Law was issued as well as rules covering areas ranging from interconnection (1994) to public telephony (1996), from numbering issues (1996) to local telephony (1997).

To prepare the path for competition, it was necessary to define the rules for interconnection with Telmex. Some of the basic rules were already established in Telmex's Concession Title, which required Telmex to allow interconnection of networks and equipment and allowed the parties to negotiate among themselves the terms of interconnections for a "reasonable period of time" (SCT, 1990b, Section 5.2). The Concession also required Telmex to extend its network's capacity to facilitate interconnection, as well as to apply an open network architecture (ONA) design and to allow resale of network capacity. Telmex was compelled to interconnect with all the authorized long distance operators under equal access terms starting January 1, 1997, so that users could select the service provider of their choice. Telmex, in consultation with the Secretariat of Communications, was to propose an interconnection plan by January of 1994, which would be reviewed by any other interested parties.

After a period of consultation, in June of 1994 the Resolution on the plan for interconnection with long distance public networks (SCT, 1994) was issued, providing guidelines that, according to the SCT "would allow the user to choose freely among operators to carry each of his long distance calls from any point of origin within the national territory" (SCT, 1994, Section 1). To promote entry, the Resolution did not set any limits on the number of long distance competitors, but required operators to obtain a license (concession) from SCT in order to provide services. In accordance with the Concession Title and the Reglamento of 1990, the interconnection resolution also
provided some leeway for the new competitors to deal directly with the incumbent in matters of interconnection fees and affirmed the authority of the SCT to intervene in cases of disagreement. Finally, the Resolution established a staggered schedule for the availability of interconnection points throughout the country, including cities that were selected by the Secretariat and the new operators, in agreement with Telmex.11

Once the rules for interconnection were set and the administration of President Ernesto Zedillo took power in December of 1994, the Ministry engaged itself in an intense period of regulatory activity. An important step in promoting new entry in the telecommunications market was taken in March of 1995, with the revision of the 28th Article of the Mexican Constitution. This article provided the Mexican government exclusivity for the ownership and operation of satellite communications. The reform allowed private participation in this sector through licensing, retaining the role of overseer of this sector to the State. This change opened the door to new participants and new technology to use the spectrum for the provision of telecommunication services.

In June of that same year, after a period of debate, a final resolution was made about the establishment of a new Law for the sector. The Federal Telecommunications Law of 1995 (Telecommunications Law, hereafter) was approved by Congress to regulate the usage of the electromagnetic spectrum, satellite communications, and telecommunication networks, and to promote the efficient development of the telecommunications sector, while affirming the State's sovereignty over the radio electric portion of the spectrum and national satellite orbits. The Telecommunications Law establishes competition as the driver of network extension, as it underscores that
the promotion of a healthy competitive environment among providers would bring about better prices, improved quality, and diversity of telecommunication services for all users, as well as in "the promotion of an adequate social coverage" (SCT, 1995, p. 35).

In preparation for the opening of competition, the *Telecommunications Law* defined the services that would require licensing, set the requirements for granting concessions or permits for providing telecommunications services, and granted new entrants the freedom to set up fees for their services (See Table 4.3). In this sense, the new Law served several purposes. It gave the status of law to interconnection provisions and to the arbitration process contained in Telmex's Concession Title and the 1994 Resolution. It also set the foundations for procedural transparency in the licensing process by establishing, in advance, qualification criteria for judging competing applicants. By setting up qualifying criteria and specific timeframes for deliberation in licensing and arbitration processes, the Law intended to restrain, in part, the discretionary actions of the Secretariat and, later on, of the new regulatory agency, thus providing a more credible and transparent environment for competition to develop.

Levy and Spiller (1996) point out that the existence of restraint mechanisms, such as these, on arbitrary actions of regulators is a necessary but not sufficient condition to improve the performance of telecommunication industries and attract investment to the sector. These were, indeed, important goals of the institutional reform process in Mexico. Once the Law established the basic regulatory framework, more specific regulations were issued in the following years to complement its dispositions.
<table>
<thead>
<tr>
<th>Area</th>
<th>Resolution</th>
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<tbody>
<tr>
<td>Licensing</td>
<td>• Establishes a method of public auction for granting concessions to use radio spectrum frequencies and orbital positions.</td>
</tr>
<tr>
<td></td>
<td>• Sets time limits for SCT to evaluate and rule on licensing decisions (60 days for spectrum usage and 120 days for public telecommunication networks).</td>
</tr>
<tr>
<td></td>
<td>• Waives the need for a permit, license, or registration to operate private telecommunication networks.</td>
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<tr>
<td></td>
<td>• Allows foreign satellite systems, with legal representation in Mexico, to obtain licenses and provide services, under reciprocity terms.</td>
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<td></td>
<td>• Allows licensees to provide all telecom services, except broadcasting.</td>
</tr>
<tr>
<td>Interconnection of Public</td>
<td>• Requires licensees to adopt an ONA design to facilitate interconnection and interoperability.</td>
</tr>
<tr>
<td>Telecommunication Networks</td>
<td>• Gives SCT responsibility to issue technical plans (signaling, numbering, and transmission, among others) that promote development and competition under non-discriminatory conditions.</td>
</tr>
<tr>
<td></td>
<td>• Requires all licensees to interconnect their networks and to enter into an interconnection agreement with Telmex in no more than 60 calendar days. If no agreement is reached after this period, or if requested, the Ministry would intervene and have up to 60 calendar days to rule on the areas of disagreement.</td>
</tr>
<tr>
<td></td>
<td>• Requires unbundling of network elements, accounting separation, and number portability.</td>
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<td></td>
<td>• Grants all providers non-exclusive access to rights of way and other public property.</td>
</tr>
<tr>
<td>Pricing Regulation</td>
<td>• Allows licensees and permittees to freely set rates for their services, subject to satisfactory conditions of quality, safety, competitiveness, and permanence.</td>
</tr>
<tr>
<td></td>
<td>• Prohibits discriminatory practices and cross-subsidization of competitive services, either directly or through affiliates.</td>
</tr>
<tr>
<td></td>
<td>• Allows the Ministry to set specific conditions on quality of service, rates, and information provision for public telecommunication providers found to have substantial market power, in accordance with the Federal Law on Economic Competition.</td>
</tr>
<tr>
<td></td>
<td>• Establishes as an objective for pricing regulation, including that of interconnection rates, the recovery of, at least, average long run incremental cost (LRIC).</td>
</tr>
<tr>
<td>Foreign Investment</td>
<td>• Allows foreign participation of up to 49 percent, except in mobile telephony where 100% foreign ownership may be granted.</td>
</tr>
<tr>
<td>Regulatory Agency</td>
<td>• Provides for the creation of an agency, separate from SCT, with technical and operative autonomy by no later than Aug. 10, 1996.</td>
</tr>
</tbody>
</table>


Table 4.3: Main resolutions of the Federal Telecommunications Law of 1995
Other guidelines were also issued at this time for the provision of national and international long distance services, where competition would begin just a few months later.

Some of the decisions in the *Rules for Long Distance Service* (SCT, 1996a) and the *Rules for International Long Distance Service* (SCT, 1996b) include the definition of the presubscription (pre-selection) process through which users would select the long distance provider of their choice, as well as rulings on the billing and dispute resolution processes. To support the negotiation processes among operators, the Rules for Long Distance Service also provided for the creation of a Long Distance Carriers Committee, which would coordinate the presubscription process, oversee the sector for irregularities, and decide on the Database Administrator (Cofetel, 2000, pp. 19-20).

In the area of international long distance, SCT's decision on reciprocal compensation, although intended to provide a uniform playing field for all operators, in the short term tended to benefit the incumbent the most. The system of proportional return for the allocation of incoming calls, for example, gives each operator the right to receive incoming international traffic from a country proportional to the outgoing traffic it carried to this nation; this system was to be used for at least 3 years. Accordingly, if Telmex generates 60 percent of the outgoing traffic to the US, it will in turn receive 60 percent of incoming traffic, no matter which carrier generates the call in the US ("Mexico finalises," 1995; Bardacke, 1994, p. 28).

Since Telmex was designated to be the default operator for the pre-subscription process, it kept a large portion of the long distance market after competition began and, thus, benefited from carrying a large proportion of the total international traffic. By the
same token, the system of uniform international settlement rates, which allowed the provider with the largest percentage of outgoing calls during a six-month period to negotiate settlement rates, gave Telmex exclusive control over this process, a benefit that could not be shared by other providers for some time.

While the SCT worked on the regulation of the long distance sector since 1994, the rules for payphones and local telephony--services open to competition since the privatization of Telmex--were not issued until after the end of Telmex's monopoly, even when the performance of Telmex in increasing penetration of these services was below expectations. According to Cofetel (2000, p. 51), the freeze on Telmex's rate rebalancing, mandated as a result of the 1994 economic crisis, maintained local rates at a level too low for new competitors to be attracted to the sector and profit by providing service. Consequently, no new concessions were granted during this period and Telmex maintained a de facto monopoly on these services. This, however, does not explain the Ministry's delay in issuing regulations that would have both set the conditions for competition in services and facilitated entry once the suspension on rate rebalancing was lifted.

The waiting game for local service regulation finally ended in December of 1996, when the Rules for Public Telephony Service (SCT, 1996c) were issued, requiring interconnection to local exchange carriers and accounting separation, and giving licensees freedom to set their rates under satisfactory conditions of efficiency, permanence, quality, safety and competitiveness, among other rulings (Cofetel, 2000, p. 21). A few months later, in October of 1997, the rules for local telephony were issued
too, including provisions for network interconnection in accordance with the providers' coverage commitments, and for the operation of fixed and wireless local service (SCT, 1997).

After a period of regulatory inactivity, the Secretariat of Communications worked steadily during the last years of Telmex's monopoly to set a regulatory framework that would stimulate the entry of new competitors into the telecommunications sector. Throughout all of the laws and regulations discussed above, the principles of legal certainty, transparency, non-discrimination, and competitiveness are clearly underscored as guiding rules. The pressure to successfully implement these principles has come not only from internal forces, but also external ones. As a signatory to the North American Free Trade Agreement (NAFTA) in 1994 and the Fourth Protocol of the General Agreement on Trade in Service (GATS) negotiated under the World Trade Organization (WTO) in 1997, Mexico has opened the sector to competition and agreed to follow measures so as to prevent anti-competitive practices by major suppliers, and to create transparent procedures for universal service funding, interconnection, and dispute resolution.

As in the case of the Mexican regulatory framework, international agreements emphasize transparency, non-discrimination, and competitive neutrality as fundamental conditions for healthy competition in the sector. Yet, the implementation of these principles is not easy. Realizing this, an increasing number of countries involved in the process of institutional reform of their telecommunication systems have established separate regulatory agencies as a necessary, but not sufficient, condition for the success of this process. Among their multiple functions, these agencies oversee the complex
process of entry of new competitor providers and are responsible for implementing and enforcing rules. Although late in doing so, Mexico has joined the more than 90 countries around the world with a separate regulatory authority for the telecommunications sector (Intven, 2000, p.1-1). The characteristics of this agency are discussed in the following section.

Creation of a Regulatory Agency

Mexico was a latecomer with respect to the creation of a regulatory agency to oversee the growing telecommunications industry. Going against recommendations of international organizations, such as the World Bank,14 to establish an independent regulatory agency at the time of Telmex's privatization, the Secretariat of Communications and Transport (SCT) remained as the only government office in charge of regulating and overseeing the industry until 1996. After the privatization, SCT relinquished most of the operational control over Telmex, but maintained de jure control over it through performance objectives, managerial accountability of Telmex's activities via results reports, and the periodic approval of the company's expansion and modernization programs. The enforcement powers of the Ministry were linked to its ability to impose monetary sanctions for non-compliance and its control over the approval, supervision, and revocation of concessions and permits. Its approval was also necessary for Telmex to be able to change its bylaws and to issue equity, equity securities or certain debt instruments to finance expansion programs. Although the Ministry did impose some sanctions on Telmex during the monopoly period for quality of service problems, the relationship between them was for the most part amicable.
By 1996, in compliance with a provision of the *Federal Telecommunications Law*, the President issued a decree establishing a regulatory agency for the sector, just a few days before the deadline set by the Law. The *Comisión Federal de Telecomunicaciones* (Federal Telecommunications Commission or Cofetel), modeled partially on the Federal Communications Commission (FCC) of the United States, is a collegial commission composed of four commissioners, including its President. The new commission was established as an administrative agency separate from the Ministry, having technical and operative autonomy, with the purpose of regulating and promoting "the efficient development of telecommunications" (Presidencia, 1996). The commission was envisioned to promote the development of the sector through the promotion of competition, the establishment of a regulatory framework that would provide security to new investments, and through research and training activities (Presidencia, 1996).

To this end, Cofetel was granted authority to establish technical plans and standards for the industry, manage the allocation of the spectrum, oversee the interconnection process for equipment and networks, and perform adjudicative functions whenever the parties were not able to reach an agreement; it can also establish specific conditions for rates, and quality of service for those licensees that are ruled to have substantial market power, and in general, it oversees the fulfillment of any condition established in licenses and permits. Yet, in contrast to other regulatory agencies in this sector, such as the FCC and the state public commissions in the United States, Cofetel does not have the power to grant licenses or permits, revoke them or
impose sanctions on its own. The Ministry retained these enforcement powers and limited Cofetel's authority in these matters to the review of petitions and the provision of recommendations to the SCT, which makes the final decision.

This limitation on the regulator's licensing and sanctioning capabilities not only weakened the negotiating power and authority of the agency before the industry, but it created functional overlaps between SCT's Subsecretariat of Communications--in charge of overseeing the telecommunications sector--and Cofetel. It also created new bureaucratic echelons that slowed down even more the regulatory decision-making process in the sector, a weakness that would be harshly criticized by the industry stakeholders and the press.

By April of 1998, conflicts in the resolution of disputes over interconnection charges made evident the duplicity of functions, prompting modifications to the internal bylaws of the Ministry and the agency that clarified their responsibilities. As a result, most of the functions performed until then by the Subsecretariat were transferred to Cofetel, and the then subsecretary of Communications, Javier Lozano, assumed the position of president of Cofetel, replacing Carlos Casasús--a former member of the board of directors of Telmex.

The performance of the Commission during the first three years of its operation, particularly regarding issues of interconnection between long distance operators, has also engendered a debate about its need to increase its independence, particularly from the Ministry of Communication. Although structurally speaking the Commission is a separate administrative agency, it, like other regulatory agencies around the world, is not isolated from political or financial influences from other branches of government.
The Mexican President, for instance, through the SCT, appoints and can revoke the appointment of Cofetel's commissioners, making Cofetel vulnerable to political pressures and, particularly, to discontinuities in policies and personnel whenever there is a change in administration. Similar pressures can be exerted on the commission through its finances, since its budget requires the approval of the Ministry of Finance (Secretaría de Hacienda y Crédito Público or SHCP).

Perhaps one of the most controversial relationships of the regulatory agency is that with the incumbent operator, Telmex. The commitments of the 4th Protocol to the GATS agreement require the regulator to be independent from the operator and to be impartial in its decisions. Cofetel's authority and impartiality have been questioned by the new competitors, particularly by those in the long-distance sector, resulting in appeals before the courts and the suspension of investment in the sector by some of the competitors. Among the controversial issues are disputes on interconnection rates, the appropriation of a percentage of these charges for subsidizing Telmex's local services, local access fees, and problems with charges being imposed on 800 numbers.

More recently, the heated debate on these issues has brought the need to revise the regulatory framework and to increase Cofetel's level of independence to the top of the new administration's agenda. The Mexican Congress is revising the Federal Telecommunications Law to establish the basis for a Universal Service Fund to expand the network, promote investment, and increase Cofetel's autonomy by giving it legal standing and increasing its budget (Mandel-Campbell, 2000a; Telmex, 2001b). Luis Ernesto Derbez, President Fox's economic advisor, stated in this respect that Fox's
administration "would like to give Cofetel true autonomy to which it has no right at this moment," particularly autonomy from political pressures (AP, 2000; Moore, 2000, p.1).

In sum, the conflicts facing the Mexican regulatory agency seem to be the result of inconsistencies between the formal and informal institutional constraints to which the different actors in the sector must submit. The formal constraints are embodied in laws and rules that attempt to establish an unambiguous environment for competition. Yet, the implementation of these rules has made evident the existence of loopholes in the regulatory framework and of informal institutional constraints--i.e., unwritten norms of behavior and traditions that structure daily interactions (North, 1990)--that tend to favor behaviors more consistent with those of the monopoly period. The disputes over interconnection and the continued rule of Telmex as a dominant carrier in five markets are two cases in point that are reviewed below.

Barriers to Competition: Interconnection Disputes and Incumbent's Market Dominance

There is a high level of agreement in the literature about the significance of interconnection fees for the promotion of competition in markets with a predominant incumbent network provider. If termination rates are set too high, they might off-set the cost advantages of new service providers and stifle competition. As stated above, the formal constraints included in the interconnection plan for long distance networks and the Local telephony rules allowed the Ministry initially, and then Cofetel, to intervene and impose terms on both companies, whenever an agreement could not be reached
between the parties. Since the opening of long distance competition, the regulator has had to intervene every time a new interconnection rate has been negotiated between Telmex and the new competitors.

When the negotiations on long distance interconnection rates began in 1996, the parties' proposals were so divergent\textsuperscript{16} that no agreement could be reached without the intervention of the Ministry of Communication. The Ministry's use of its discretionary powers revealed the existence of a loophole in the rules, since no clear specification was made of the decision-making procedures that it would employ in case its intervention was needed. In April of that year, SCT decided to set the charges between the two extremes, but at a relatively elevated level (US$ 0.0536 cents per minute in 1997, US$0.0469 cents in 1998, and US$ 0.0315 cents in 1999),\textsuperscript{17} a resolution that satisfied none of the players involved (Hernández, 1996a).

The decision, however, tended to benefit Telmex the most. The interconnection charge had two components, the charge for originating or terminating national and international long distance calls in Telmex's network, and a surcharge for incoming international long-distance calls equivalent to 58 percent of the international accounting rate (Briceño, 2000, pp. 13-14). The surcharge would be directed to subsidize Telmex's local services, and to pay for investments made by Telmex in preparation for interconnection (Aguilar & García, 1996). According to Cofetel, the decision to set high interconnection rates for 1997 and 1998 allowed Telmex to finally continue the process of rate rebalancing--stopped during the economic crisis--, adjusting local rates without abrupt short-term changes; it would also balance the long distance companies' net revenues for origination and termination of calls, thus becoming a disincentive for
"the artificial generation of traffic" (Cofetel, 2000, pp.29-30). When questioned about this decision, Carlos Casasús, then Subsecretary of Telecommunications and later Cofetel's president, stated that he "did not consider it a subsidy, but an incentive for the development of local services" (Hernández, 1996b).

There were, however, no clear rules about the objectives of this subsidy, nor information about who would supervise its usage to provide transparency in the process and avoid cross-subsidies. Casasús simply stated that "those issues [were] not up to discussion" (Flores, 1997). The 58 percent surcharge was eliminated in 1999 during the negotiation of interconnection charges for the 1999-2000 period, but long distance providers still debate the existence of surcharges in Telmex's international termination rates of about US$ 0.15 cents above cost (Shetty, 2001).

The relative bias of authorities towards Telmex became more evident later in 1997. In June, Cofetel announced that new service providers interconnecting with Telmex's network would have to pay the incumbent for special projects investments related to billing, numbering, and presubscription costs made by Telmex in anticipation of interconnection (Pérez, 1997a). In total, the new competitors would have to pay US $422 million dollars for costs that were previously assumed to be included in the original interconnection rates. As a response, most long distance carriers began revising their investment proposals.

The long distance carrier Avantel--supported by its American partner MCI/WorldCom--challenged the authority of SCT and Cofetel, by having their decision subjected to judicial review and refusing to pay any more interconnection charges until the courts make a decision. Later on, Alestra, a long distance carrier in partnership with
AT&T, joined Avantel's challenge, making it an international tug of war between Mexican and American companies and authorities. Since 1996, competitors have filed actions for more than 200 injunctions before the Mexican courts to stop the payment of interconnection fees pending final resolution of their cases (Mandell-Campbell, 2000b).

The telecommunication authorities have maintained the legality of the interconnection charges, and consistently denied any bias towards Telmex. They have also addressed the concerns expressed by the new competitors, at times pressured by external forces. For instance, during the last long distance interconnection negotiations in 2000, the parties failed once again to reach an agreement on the charges for the 2001-2002 period, and the U.S. Trade Representative Charlene Barshefsky threatened, on behalf of WorldCom and AT&T, to file a complaint before the World Trade Organization on the failure of the Mexican government to open its telecommunications market to competition. Partly in response, Cofetel announced in October of 2000 two important decisions concerning Telmex, one of which was a reduction in interconnection rates; the other was the publication of the long-awaited dominant carrier rules to curtail Telmex's substantial market power in five markets.

With respect to the interconnection rates, Cofetel, taking into account other international rate cases and considering the advances obtained by Telmex in rate rebalancing, reduced interconnection charges for 2001 from US $0.0336 cents per minute effective in 2000 to US $0.0125 per minute (Cofetel, 2000, p. 31). It also required that the interconnection rates for termination of local calls, for large
businesses, and for resale services reflect the costs of providing those services.\textsuperscript{22} In response, Telmex filed an injunction in November of 2000 to stop the new fees from being applied in January of 2001.

The tactic of using injunctions as delay mechanisms against regulatory measures became a distinctive feature of the opening of the Mexican telecommunications market to competition. By resorting to the courts, both Telmex and the new competitors have challenged the legitimacy of Cofetel as an authority in the area, as well as the regulator's ability to enforce rules, particularly those pertaining to Telmex's monopolistic practices. The legal battles also have had a chilling effect on investment commitments and have kept competition from developing.

Besides interconnection, perhaps the legal battle that has tested Cofetel's enforcement powers the most is that over the regulations to curtail Telmex's market dominance. In December of 1997, the Federal Commission for Competition (COFECO)--the Mexican anti-trust commission--reviewed Telmex's market power in local telephony and declared it a supplier with substantial power in local telephony, national and international long distance, interconnection services, and long distance resale (OECD, 1999b, p. 257).

As part of its functions, Cofetel was instructed by Cofeco to issue dominant carrier regulations, allowing the regulator to impose additional conditions and restrictions on Telmex as a dominant carrier in these markets. The rules would set rate floors to avoid predatory pricing, prevent the company from engaging in anti-competitive practices, and impose on it more stringent standards for quality of service, network information, and accounting practices than those imposed on smaller carriers.
At that time, Telmex filed and won an injunction against Cofeco's rulings, blocking Cofetel from imposing the new restrictions. This victory was partially overturned in July of 1999, when a judge ruled that the regulations could be issued if they were "in the public interest" (Mandel-Campbell, 2000c, p. 7). Cofetel's delays in issuing the dominant carrier regulations seemed to provide support to the new competitors' and the United States government's claims that it was an attempt to protect Telmex.

Cofetel brought temporary relief to the tension when it issued the dominant carrier rules and set lower interconnection rates, thus addressing two important concerns of the long distance carriers and the United States. Encouraged by these steps, the United States officials held off their complaint before WTO, but left open the possibility of continuing with the process in the future, if needed.\textsuperscript{23} As in the case of the new interconnection rates, Telmex filed an injunction against the dominant carrier rules because it considered them "against the public interest which Cofetel is responsible for advancing" (Telmex, 2000d).

Tapping on the nationalist sentiment of the public, Telmex issued a statement affirming that the regulations were biased in favor of the U.S. competitors. According to Telmex this bias had negative effects not only for Telmex, but also, in their opinion, for the consumers. According to Telmex, the new rate regulations, such as price floors for Telmex's long distance services, would increase the profitability of the new competitors and keep rates high, by limiting Telmex's ability to transfer the benefits of increased productivity to its consumers; it also points out that forcing Telmex to provide services to its competitors based only on cost of service may be a disincentive for
network investment by the new carriers (Telmex, 2000d). Disregarding the difference in market power that justified the new regulations, Telmex demanded policies that provide "equal opportunity for all carriers" (Telmex, 2000d).

Telmex's newer injunction raised doubts about the ability of Cofetel to implement the dominant carrier regulations soon thereafter, thus inciting the U.S. Trade representative (USTR) to follow up with the WTO petition and to require an arbitration panel, a request appealed by Mexico. Notwithstanding that the USTR recognized Cofetel's recent efforts, it pointed out that the panel was needed because the Mexican government had failed to comply with its WTO commitments in two areas: (a) provision of timely, cost-oriented, and non-discriminatory interconnection at any feasible point for local, national, and international long distance traffic, and (b) approval of alternative means to terminate incoming international long distance calls, so that competitors would not be affected by the current above-cost termination charge of 19 cents per minute (USTR, 2000, p. 2).

The conflict over above-cost settlement rates is particularly important for the United States and Mexico because their cross-border traffic route has the highest volume of minutes in the world (Shetty, 2001). In 1998, for example, 88.6 percent of the outgoing international traffic from the United States was to Mexico (OECD, 1999b, p. 279), and according to an ITU study, the Mexican incoming to outgoing traffic ratio of switched minutes with the United States for 1997 and 1998 was 3 to 1 (Briceño, 2000, p. 5). This traffic imbalance favors the Mexican settlement revenues and has been further encouraged by Mexico's current policy of proportional return, vehemently
defended by Cofetel. The traffic imbalance and high termination rates for US carriers explain why the issue of international resale and alternatives for termination are important topics in the American agenda.

Meanwhile, changes in the Mexican administration have brought forth expectations for solutions to these problems and for the beginning of an era of true competition in the sector. In fact, an unexpected turn of events occurred just a few days into the Fox administration. On December 27, 2000, after meeting with the new SCT Minister, Pedro Cerisola, Telmex, Avantel, and Alestra agreed to settle their differences on quality standards, resale and interconnection rates, and more surprisingly, on the reimbursement of close to US$137 million in debts to Telmex, including those incurred for the lack of payment of disputed special interconnection projects and the 58 percent surcharge on incoming international calls, both under injunctions since 1997 (Alden & Mandel-Campbell, 2001).

As part of this agreement, Telmex consented to Cofetel's interconnection rates of US$ 0.0125 cents per minute and to provide Alestra and Avantel digital trunking and interconnection at disputed points; Alestra and Avantel, on the other hand, dropped more than 20 injunctions, agreed to pay Telmex withheld interconnections fees, and will cease illegal by-passing of Telmex's network for termination of calls. Reductions on settlement rates for U.S. carriers and the possibility of Alestra and Avantel joining Telmex in the settlement agreements are also being negotiated (Smith, 2001). As a result of this agreement, the USTR forestalled its petition for a WTO panel, but again underscored its right to pursue the issue if Mexico did not address disputes over settlement rates and Telmex's market dominance. According to Amy Stillwell, a
spokesperson for USTR, "right now the ball is in Mexico's court. We want to give their new administration time, so [we] are not pressing the issue right now, but we want to see more progress" ("U.S. won't pursue", 2001).

The challenges to Cofetel's authority and the obstacles to regulatory enforcement created by the excessive use of injunctions during the competitive era have underscored the need to increase the agency's power and independence. To this purpose, as stated above, Mexican legislators created a telecommunications parliamentary commission, consisting of senators and congressmen from the different parties, to revise the telecommunication law.24 One of the goals of such revision is to set limits on the appeal process and on the ability of the companies to stop regulatory decisions through injunctions (Gori, 2001). It is expected that the revised Telecommunications Law will also strengthen Cofetel's enforcement capacity, finally giving it legal standing for licensing and sanctioning, and to conduct open consultation (Shetty, 2001). The new rules may also establish fixed terms for the commissioners, so that they are not affected by changes in administration (Mandel-Campbell, 2000a; Mena, 2000). As part of the revisions, Cofetel has also proposed the creation of new interconnection rules and modifications to the rules for the long distance service (Pedrero, 2001c).

In sum, during its short life, Cofetel has made progress in establishing a regulatory framework for the competitive era. Yet, several factors have restrained competition from developing and delayed network expansion. Among these are loopholes in the regulations, the stickiness of informal institutional constraints that tended to favor the incumbent and also affected the implementation of the regulations, and finally, the excessive use of judicial means, such as injunctions. New strides have
been made recently that are expected to improve the independence of the regulator and promote competition in the Mexican telecommunications industry. The success of these latter efforts is still to be seen.

C) Introduction of competition

The previous two sections described the processes of institutional reform affecting the incumbent and the regulatory entities for the telecommunications sector. This last section focuses on the third fundamental component of institutional reform: the entry of new operators into the market. The previous section described some of the formal and informal institutional constraints faced by the new entrants; based on this context, the present section describes the current status regarding competition in the telecommunications market for long distance, fixed and wireless local service, and payphone service.

In Mexico, the Reglamento de Telecomunicaciones introduced competition at the margins of the market, in areas such as value-added services, terminal equipment, and mobile communications beginning in 1990. The core local and long-distance markets, however, remained de facto and de jure monopolies of Telmex, respectively, for the period granted in Telmex's Concession Title. This stranglehold did not deter future competitors from showing their interest in the attractive Mexican telecommunications market, valued by the Office of the United States Trade Representative at about $12 billion dollars (USTR, 2000).
As soon as the new regulatory framework began taking form, foreign telecommunications and manufacturing companies began making arrangements to gain access to the market through partnerships with Mexican companies. Encouraged by Telmex's history of bad performance, the new competitors expected to rapidly reduce Telmex's market share and to begin profiting from their network investments in a short time. In the long distance market, for instance, competitors were expected to take as much as 20 percent of Telmex's market in the first year alone and the market was expected to grow at least 12 percent annually (Bardacke, 1994, p.28).

Competition was also eagerly expected by consumers, who looked forward to having new options in the provision of service, better quality, and lower prices. Reality, however, would prove different. Telmex's dominance and the conflicts over interconnection rates have had negative effects on the level of investments made by new long-distance competitors, and may also affect the investment commitments of local competitors in the future. With respect to rates, consumers have seen average reductions in rates for long-distance services of 50 percent in real terms\textsuperscript{25} after three years of competition in the market (Cofetel, 2000, p. 44). Local services rates, on the other hand, have increased faster than inflation from 1996 to 1998 as a result of rate rebalancing. By the end of 1998, for instance, the rates for monthly residential rent had increased by 88 percent in real terms; the rates for measured service by 33 percent, and for business rent by 37 percent in real terms compared to 1996 (Cofetel, 2000, p. 51).

Although the short-term results of the introduction of competition have been mixed, in terms of number of participants the results are so far positive. After a long waiting period, the local and payphone markets are finally truly open to competition and
are attracting an increasing number of providers relying on fixed and wireless technologies. As of December of 2000, the Mexican telecommunications market had more than a hundred licensed operators and, with the exception of the analog mobile service, which operates under a duopoly system, the major markets were fully opened to competition (see Table 4.4). The current status of competition in each of these markets is discussed below.

**Competition in the Long-Distance Market**

In accordance with Telmex's Concession Title, competition in national and international long-distance services began in January of 1997. Competition in this sector was phased in beginning in the major 60 cities of the country in 1997 and reached two hundred cities by January of 2000, so that currently, approximately 85 percent of the lines have been opened to the presubscription process (Cofetel, 2000, p.43). Users in these cities selected their new service provider through ballots, having Telmex as a default provider for those that did not reply. The selection of long-distance providers on a call-by-call basis was supposed to be available in 1997, but this mode of selection has been delayed at the request of all the long-distance providers because of disagreements on billing and collection arrangements (Briceño, 2000, p. 7). According to Cofetel, from January of 1997 to May of 2000, more than 13.5 million valid requests to change long-distance providers had been submitted (Cofetel, 2000, p. 44). Based on results published by the Mexican regulatory agency, by the end of 1997, Telmex reported a 74.8 percent market share in long distance for those 60 cities, having lost an average 48 percent of its lines in the three major cities--Mexico City, Monterrey, and Guadalajara--to its two strongest
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<tbody>
<tr>
<td>Local PSTN</td>
<td>Fully open</td>
<td>18 Wireline: 10 Fixed or mobile wireless (1.9 GHz): 5 Fixed wireless (3.4 GHz): 3</td>
<td>8 Wireline: 4 Wireless: 3 Both: Telmex</td>
</tr>
<tr>
<td>National PSTN</td>
<td>Fully open</td>
<td>25 Long distance: 19 Other services: 6 Pending approval: 11</td>
<td>17</td>
</tr>
<tr>
<td>International PSTN</td>
<td>Fully open</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Analogue Mobile (800 MHz)</td>
<td>Duopoly</td>
<td>10 1 national operator (Telcel) and one other competitor in each of the nine regions</td>
<td>10</td>
</tr>
<tr>
<td>Other Mobile Communication (PCS - 1.9 GHz)</td>
<td>Fully open</td>
<td>5 Regions 1-9: 3 Regions 1 &amp; 4: 1 Region 8: 1</td>
<td>5</td>
</tr>
<tr>
<td>Payphones</td>
<td>Fully open</td>
<td>44 19 permit applications pending approval</td>
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Table 4.4: Market structure of the Mexican telecommunications industry
competitors, Alestra and Avantel. In 1998, the second phase opened competition in 40 more cities, and Telmex increased its share to 79.2 percent of the competitive market. By March of 2000, the new competitors had gained an estimated 39.41 percent of the market (Cofetel, 2000, p.37).

The government did not establish a limit on the number of concessions for interstate public networks that will be granted. Currently, 25 concessions for interstate services have been approved, of which 19 are for providing national long distance, including those of Telmex and its regional affiliate Teléfonos del Noroeste (Telnor), and eleven more applications are under review (Cofetel, 2000, p. 44). Among the 19 national long distance providers, three currently dominate the market: Alestra (a partnership of the Mexican Grupo Alfa and AT&T), Avantel (a partnership between the Mexican Bank Banamex and WorldCom) and Telmex. As of March of 2001, Telmex controlled around 70 percent of the total number of lines and minutes of long distance traffic, while Alestra and Avantel hold 11 and 12 percent, respectively, of the number of lines and around 15 percent of the minutes of L.D. traffic (Pedrero, 2001a). Other major players include Iusatel, the long distance subsidiary of Grupo Iusacell–Telmex's major competitor in mobile telephony–, which is controlled by Verizon and has Vodaphone as a shareholder; Axtel (in partnership with Bell Canada International and WorldTel Limited), and Maxcom Telecomunicaciones (with CT Global Telecommunications as a shareholder). For international long distance service, the Mexican government has approved nine concessionaires, including Telmex, its affiliate Telnor, and its major competitors, Avantel, Iusatel, and Alestra, among others (see Table 4.5).26
<table>
<thead>
<tr>
<th>Company</th>
<th>Services Offered</th>
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<tr>
<td>Teléfonos de México, S.A. de C.V. (in operation)</td>
<td>National &amp; international l.d.</td>
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<tr>
<td>Teléfonos del Noroeste, S.A. de C.V. (in operation)</td>
<td>National &amp; international l.d.</td>
</tr>
<tr>
<td>Iusatel, S.A. de C.V. (in operation)</td>
<td>National &amp; international l.d.</td>
</tr>
<tr>
<td>Axtel, S.A. de C.V.</td>
<td>National long distance</td>
</tr>
<tr>
<td>Bestel, S.A. de C.V. (in operation)</td>
<td>National &amp; international l.d.</td>
</tr>
<tr>
<td>Grupo Intelcom de México, S.A. de C.V.</td>
<td>National long distance</td>
</tr>
<tr>
<td>Larga Distancia Internacional Mexicana, S.A. de C.V.</td>
<td>National long distance</td>
</tr>
<tr>
<td>Marcatel, S.A. de C.V. (in operation)</td>
<td>National &amp; international l.d.</td>
</tr>
<tr>
<td>Maxcom Telecomunicaciones, S.A. de C.V.</td>
<td>National long distance</td>
</tr>
<tr>
<td>Miditel, S.A. de C.V. (in operation)</td>
<td>National long distance</td>
</tr>
<tr>
<td>Operadora Protel, S.A. de C.V. (in operation)</td>
<td>National &amp; international l.d.</td>
</tr>
<tr>
<td>Operadora Unefon, S.A. de C.V.</td>
<td>National long distance</td>
</tr>
<tr>
<td>Presto Telecomunicaciones, S.A. de C.V.</td>
<td>National long distance</td>
</tr>
<tr>
<td>RSL Com Net de Mexico, S.A. de C.V. (in operation)</td>
<td>National &amp; international l.d.</td>
</tr>
<tr>
<td>Telereunión, S.A. de C.V.</td>
<td>National long distance</td>
</tr>
<tr>
<td>Unión Telefónica Nacional, S.A. de C.V.</td>
<td>National long distance</td>
</tr>
<tr>
<td>WL Comunicaciones, S.A. de C.V.</td>
<td>National long distance</td>
</tr>
<tr>
<td>GE Capital Spacenet Communications Services de México, S.A. de C.V.</td>
<td>Teleport</td>
</tr>
<tr>
<td>Telecomunicaciones del Pueblo, S.A. de C.V.</td>
<td>Videoconferences</td>
</tr>
<tr>
<td>Enlaces Satelitales, S. de R.L. de C.V.</td>
<td>Teleport</td>
</tr>
<tr>
<td>Mexigulf Telecomunicaciones, S.A. de C.V.</td>
<td>Lease of network capacity</td>
</tr>
<tr>
<td>Corporación Nacional de Radiodeterminación, S.A. de C.V.</td>
<td>Maritime and land mobile communications via satellite</td>
</tr>
<tr>
<td>Global Crossing Landing Mexicana, S. de R.L.</td>
<td>Lease of network capacity</td>
</tr>
</tbody>
</table>

Source: Cofetel (2000, pp. 45, 50); OECD (1999b, p. 258).

Table 4.5: Long Distance Concessionaires in Mexico as of September of 2000.

The introduction of competition in long distance has had positive effects on rates and on the amount of national and international traffic. According to Cofetel, from the fourth quarter of 1996 to the second quarter of 2000, average rates for national and
international long distance have decreased by 60 and 61 percent in real terms respectively,\textsuperscript{27} promoting increases in the amount of traffic for these services. From 1997 to 2000, national long distance traffic has had an average annual growth rate of 22.1 percent in minutes and 22.2 percent for incoming and outgoing international long distance (Cofetel, 2000, pp. 46, 50).

In Mexico, the introduction of competition in long distance service triggered a rate war between the incumbent and its competitors that resulted in rapid reductions in Telmex's long distance rates to get closer to those offered by its new competitors; between October of 1996 and late 1997, Telmex reduced its rates from 2.5 to 1.62 pesos per minute, a 35.2 percent decrease (Pérez-Chavolla, 1998, p. 83). It is important to point out that these rate reductions are not necessarily the result of competitive forces, but are also affected by the policy of rate rebalancing required by the Mexican government as part of Telmex's Concession Title.

**Competition in Local Telephony**

The lack of clear rules and government delays in granting licenses created a \textit{de facto} monopoly for Telmex in this market until 1998, even when the Concession Title did not give Telmex \textit{de jure} control over it. Although by 1993, two wireless companies (Pulsar and Iusacell) had already applied for licenses, the Communications Ministry's approval kept being delayed until decisions for interconnection in the long-distance market were made.
The passing of the new Telecommunications Law in 1995 and the regulation for local concessions in January of 1996 gave new impetus to the market, as it allowed local networks to provide switched voice, cable television, or any other services. A month later, the Ministry had received over fifty applications. Besides Telmex, three more companies had been licensed by mid 1997. The auction of radio spectrum frequencies for PCS and wireless local loop (WLL) applications for local telephony in 1998 brought more players into the market. In late 2000, there were ten wireline service providers, including Telmex and Telnor, five fixed or mobile wireless providers (PCS), and three WLL providers, one of them Telmex (see Table 4.6) (Cofetel, 2000, p. 52).

To promote entry in local telephony, Cofetel developed a new numbering plan that is expected to satisfy line growth for the next 40 years. It also reorganized and consolidated the geographical areas for local telephony, increasing the average number of lines per area from 6 thousand to 22 thousand. In rural telephony, the Ministry is targeting settlements with populations between one hundred and five hundred inhabitants through satellite terminals. The goal for 2003 is to provide telephone services to more than 12,600 towns using the rural satellite network (SCT, 2001, p.13). Altogether, these measures have reduced obstacles to competition and created more attractive areas for the new service providers to compete in. As a response, the new competitors have committed to investing more than US$1.2 billion for the installation of 9.5 million new lines over five years (OECD, 1999b, p. 258).
<table>
<thead>
<tr>
<th>Company</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teléfonos de México, S.A. de C.V.</td>
<td>Fixed-wire and fixed wireless (3.4 GHz) (in operation)</td>
</tr>
<tr>
<td>Teléfonos del Noroeste, S.A. de C.V.</td>
<td>Fixed-wire (in operation)</td>
</tr>
<tr>
<td>Avantel Servicios Locales, S.A.</td>
<td>Fixed-wire</td>
</tr>
<tr>
<td>Alestra, S. de R.L. de C.V.</td>
<td>Fixed-wire</td>
</tr>
<tr>
<td>Maxcom Telecomunicaciones, S.A. de C.V.</td>
<td>Fixed-wire (in operation)</td>
</tr>
<tr>
<td>Megacable Comunicaciones de México</td>
<td>Fixed-wire (in operation)</td>
</tr>
<tr>
<td>Metro Net, S.A. de C.V.</td>
<td>Fixed-wire</td>
</tr>
<tr>
<td>México Red de Telecomunicaciones, S. R.L. de C.V.</td>
<td>Fixed-wire (in operation)</td>
</tr>
<tr>
<td>Red de Servicios de Telecomunicaciones, S.A. de C.V. (Resetel)</td>
<td>Fixed-wire</td>
</tr>
<tr>
<td>Unión Telefónica Nacional, S.A. de C.V.</td>
<td>Fixed-wire</td>
</tr>
<tr>
<td>Axtel, S.A. de C.V.</td>
<td>WLL (3.4 GHz) (in operation)</td>
</tr>
<tr>
<td>Iusacell PCS, S.A. de C.V.</td>
<td>Fixed or mobile wireless (1.9 GHz)</td>
</tr>
<tr>
<td>Operadora Unefon, S.A. de C.V.</td>
<td>Fixed or mobile wireless (1.9 GHz) and fixed wireless (3.4 GHz) (in operation)</td>
</tr>
<tr>
<td>Pegaso Comunicaciones y Sistemas, S.A.</td>
<td>Fixed or mobile wireless (1.9 GHz) (in operation)</td>
</tr>
<tr>
<td>Radiomóvil DIPSA, S.A. de C.V.</td>
<td>Fixed or mobile wireless (1.9 GHz)</td>
</tr>
<tr>
<td>Servicios de Acceso Inalámbrico, S.A.</td>
<td>Fixed wireless (3.4 GHz)</td>
</tr>
</tbody>
</table>


Table 4.6: Wireline and wireless local telephony concessionaires as of September, 2000

**Competition in Wireless Services**

Following the model of the United States and Great Britain, competition in this market began in 1990 under a duopoly system composed of Telmex's wireless subsidiary, Radiomóvil Dipsa (Telcel), and a competing company. Telcel is the largest mobile operator in Mexico, currently providing service to approximately 60 percent of
the market (OECD, 1999b, p.258). The country was divided into nine service regions; Telcel provides service to all nine regions through Band B, and one of the nine new competing companies was allowed to provide service in only one of the regions through Band A. Four of the nine competing concessionaires are affiliated with Iusacell, the second largest mobile operator in Mexico, which is majority-owned by Verizon Communications (formerly Bell Atlantic) and the British wireless company Vodafone. To provide national coverage and better compete with Telcel, the nine competing companies created an association of cellular radiotelephony in 1991, and established agreements among themselves that allowed them to provide nationwide service via roaming.

Although the number of competitors in this service was moderate at the beginning, it increased as a result of the auctioning of the frequencies for fixed or mobile wireless access in the PCS band (1.9 GHz) in November of 1997. As a result, the number of allowed competing wireless concessionaires increased from two to four per region, and in some regions, even to five providers. Thus, by the end of 2000, there were ten providers of mobile services in the 800 MHz band, including Telcel, and five new PCS providers, including Radiomóvil Dipsa and Iusacell, which are also authorized to provide local fixed services (see Table 4.7).

By March 2001, however, the structure of the wireless market began to change. Attracted by the growing Mexican mobile market, Telefónica Móviles, an affiliate of Telefónica de España, purchased from Motorola four wireless companies located in the northern region of the country (Celular de Telefonía, Telefonia Celular del Norte, Baja Celular and Movitel), and in August 2001 it finalized the purchase of 49 percent of
### Table 4.7: Concessionaires of wireless and PCS telephony as of September of 2000

<table>
<thead>
<tr>
<th>Company</th>
<th>Type of Service and Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>RadioMóvil Dipsa, S.A. de C.V. (a.k.a. Telcel for wireless services)</td>
<td>Wireless (800 MHz - region 1 to 9); PCS (1.9 GHz - region 1 to 9)</td>
</tr>
<tr>
<td>Comunicaciones Celulares de Occidente, S.A. de C.V. (Group Iusacell)</td>
<td>Wireless (800 MHz - region 5)</td>
</tr>
<tr>
<td>Sistemas Telefónicos Portátiles Celulares (Group Iusacell)</td>
<td>Wireless (800 MHz - region 6)</td>
</tr>
<tr>
<td>Telecomunicaciones del Golfo, S.A. de C.V. (Group Iusacell)</td>
<td>Wireless (800 MHz - region 7)</td>
</tr>
<tr>
<td>SOS Telecomunicaciones, S.A. de C.V. (Group Iusacell)</td>
<td>Wireless (800 MHz - region 9)</td>
</tr>
<tr>
<td>Baja Celular Mexicana, S.A. de C.V.</td>
<td>Wireless (800 MHz - region 1)</td>
</tr>
<tr>
<td>Movitel del Noroeste, S.A. de C.V.</td>
<td>Wireless (800 MHz - region 2)</td>
</tr>
<tr>
<td>Telefonía Celular del Norte, S.A. de C.V.</td>
<td>Wireless (800 MHz - region 3)</td>
</tr>
<tr>
<td>Celular de Telefonía, S.A. de C.V.</td>
<td>Wireless (800 MHz - region 4)</td>
</tr>
<tr>
<td>Portatel del Sureste, S.A. de C.V.</td>
<td>Wireless (800 MHz - region 5)</td>
</tr>
<tr>
<td>Iusacell PCS, S.A. de C.V.</td>
<td>PCS (1.9 GHz - Regions 1 and 4)</td>
</tr>
<tr>
<td>Operadora Unefon, S.A. de C.V.</td>
<td>PCS (1.9 GHz - Regions 1 to 9)</td>
</tr>
<tr>
<td>Pegaso Comunicaciones y Sistemas, S.A. de C.V.</td>
<td>PCS (1.9 GHz - Regions 1 to 9)</td>
</tr>
<tr>
<td>Servicios de Acceso Inalámbricos, S.A. de C.V.</td>
<td>PCS (1.9 GHz - Region 8)</td>
</tr>
</tbody>
</table>

Source: Cofetel (2000), p. 58

Pegaso, a PCS provider. Through these acquisitions Telefónica has become the second largest wireless operator in Mexico, behind América Móvil's Telcel, with two million subscribers ("Motorola vende", 2001; Celis, 2001). The market, thus, appears to be consolidating in the hands of three strong competitors, the incumbent Telcel, Iusacell, its traditional competitor, and the new player, Telefónica Móviles. In view of these changes and the financial difficulties faced by smaller companies, such as Unefon, it is...
possible that the number of players in the market will be further reduced in the near future. On the other hand, the participation of foreign telecommunications providers has strengthened Iusacell and the companies bought by Telefónica de España, both technologically and financially. These resources will allow them to better compete against Telcel for the growing number of wireless subscribers and may have positive effects on rates and quality of service.

Although in many developed countries wireless telephony is considered a complement of wireline communications, in Mexico the long waitlist and small penetration rate of Telmex's wireline telephony has promoted the use of wireless services as substitutes. Since 1990, the number of mobile telephone users has grown rapidly, increasing from 64 thousand in 1990 to 4.4 million in May of 1999 (Cofetel, 2000, p. 56). The introduction of pre-paid cards and "calling-party-pays" (CPP) as payment systems in 1996 and 1997 respectively, accelerated even more the growth rate for this service, both in the level of usage (number of minutes) and the number of subscribers. Since the introduction of CPP, the number of users has almost tripled, reaching 11.8 million by August of 2000 (Cofetel, 2000, p. 56). Due to this fast growth, in just ten years, wireless telephony has surpassed the level of penetration reached by wireline telephony in more than a hundred years in Mexico. The estimated teledensity in wireless telephony at the end of 2000 was 13.3 users per hundred inhabitants; meanwhile, the penetration of wirelines in 2000 was expected to reach 12.5 lines per hundred inhabitants (Cofetel, 2000, p. 59).
Competition in Payphones

Similar to local service competition, the payphone market was dominated by Telmex during the period of private monopoly. The few small companies competing in the market during this period had decreasing returns to investment. As in the case of local telephony, SCT did not grant any new permits for the provision of payphones, until the technical plans and interconnection rules were established, thus providing Telmex an almost complete monopoly in this sector. In 1996, the Ministry finally established the *Rules for Public Telephony Service* (SCT, 1996c), allowing each permittee to set its own development projects, geographic extension goals, and rates, as long as their service was provided under efficient, competitive, and high quality terms.

With the new regulation in place, many companies and individuals applied for permits to provide this service, so that by the end of 2000, 44 permittees had been approved by SCT and 19 more applications are under review. The Ministry expects that the large number of competitors will rapidly increase the teledensity of payphones with investment commitments of around 1,025 million pesos for installing 150 thousand new payphones over the next five years (Cofetel, 2000, p. 62). The technological modernization of Telmex's payphones from coins to microchip debit cards has created a market niche, composed particularly of users in the low income and poverty range, which the new competitors are avidly exploiting by focusing on coin payphones and alternative technologies, such as wireless.
Competition in Other Services

Besides the entry of competition in the markets mentioned above, the Mexican government has promoted the entry of new service providers in satellite communications, valued-added services, such as Internet, and restricted television, including cable television, multi-channel multipoint distribution systems (MMDS), and direct-to-home satellite restricted broadcasting (DTH). As in the case of the markets for basic telephony, the revision of the regulatory framework for restricted television resulted in an increased number of applications for licenses. In fact, according to SCT (2001), Cofetel has granted 81 percent of the total number of existing licenses for cable television and 79 percent of those for MMDS services since 1997. As of June 2001, there were 605 cable providers, 86 MMDS licensees, and two DTH licensees in operation (Sky and Direct TV), out of six that were granted a concession. These providers were reaching 3.5 million subscribers by the end of 2000–more than twice the number of subscribers reached in 1995–and at least one of them provides services in a thousand communities (SCT, 2001, pp. 42-43).

Satellite communications is a particularly important technology for the government's rural telecommunications program. As stated above, until the Constitutional reform of 1995, the government had exclusive rights over the ownership of satellites and the provision of satellite communications services within the country. As a result of the reform, private participation is now allowed for the provision of broadcasting services, voice and data transmission for public telecommunications networks, and for the reception of signals from foreign satellite systems (SCT, 2001, p. 15). By August 2001, the government had already granted seven licenses, and three
international corporations (Iridium, Globalstar, and Orbicomm) have entered the Mexican market. Yet, the use of satellite technology for rural communications and educational programs has been mostly a government endeavor.\textsuperscript{28} Finally, in internet services, the entry of service providers (ISPs) has followed a rapid pace, reaching 230 providers at the end of 2001, with 3.7 million subscribers. Developments in this sector are discussed in greater detail in the following chapter, as part of the effects of institutional results in the area of innovation.

**Conclusions**

In just four years the structure of the Mexican telecommunications market has changed radically. The end of Telmex's private monopoly has brought many new participants into the different service markets, attracted by the large population that does not have access to basic communication services or is unsatisfied with the services provided by the incumbent. The success of the introduction of competition, however, is not automatically guaranteed. It depends largely on the strength and clarity of the regulatory framework, and on the ability of the regulatory agency to enforce these rules and oversee the incumbent's market power, as the conflicts with interconnection rates have clearly demonstrated.

Thus, the three components of institutional reform--internal reorganization of the incumbent, establishment of regulation, and introduction of competition--should not be seen as independent, but as interrelated processes that have the common goal of improving the performance of the telecommunications industry. In the following chapter, the performance of the Mexican telecommunications industry is analyzed,
focusing on the achievements in the areas of network extension (connectivity), rates (affordability), quality of service, and innovation during Telmex's monopoly and after the introduction of competition in the different markets. It is expected that the discussion on performance will facilitate a better understanding of the position of consumers with respect to the public interest in the process of institutional reform of the telecommunications sector in Mexico.
Endnotes

1 A more detailed description of the historical development of the Mexican telecommunications system is given in Pérez-Chavolla (1995) and Pérez-Chavolla & Samarajiva (1997).

2 Until December 31, 1995 the totality of this tax was deductible from income taxes. In January 1, 1996 the Tax Law for the Provision of Telephone Services was revoked (Telmex, 1996, p. 31).

3 Even when the markets for the provision of local and payphone services were opened to competition, Telmex retained a de facto monopoly over these services during most of the monopoly period because of government delays in issuing regulations for these services.

4 The year 1989 was an exception. That year Telmex achieved much higher growth and profit levels than during the immediately previous years, making the company an attractive investment for bidders.

5 Universal service is a policy concept that refers to providing access to basic telephone service to all members of a population at affordable prices.

6 "Incumbent" is the name given to the public telecommunications operator that provided services in a market under a monopoly status before the entry of new competitors to such market was allowed by regulators. It is the operator that first provided services to an area.

7 Humphreys' (2000) analysis of the privatization models employed in Argentina, Brazil, Mexico, and Chile (2000) considers that the lack of structural separation of Telmex, together with the long exclusivity period, are two important factors that have kept Mexico behind in the promotion of a healthy competitive environment in telecommunications, when compared to the cases of Brazil and Chile. In fact, the market dominance of Telmex has been a matter of contention since the end of Telmex's monopoly status in 1997, particularly in respect to the ability of the new entrants to negotiate interconnection agreements with Telmex, as is discussed below.

8 For an in-depth analysis of the different forces affecting corporate strategies, see Michael E. Porter (1985) and the work of Arnold Hax on strategic planning.
In fact, in 1993 the relationship between the government and Grupo Carso became a point of controversy. Members of Congress from the opposition parties PRD and PAN questioned the transparency and legality of the sale of Telmex to Grupo Carso, and summoned those involved with the privatization of Telmex to appear before Congress (Arizaga, 1993; "Rogozinski", 1993).

To create the conditions for equality between the incumbent and the new long distance providers, the interconnection plan established guidelines for equal access regarding numbering and dialing modes for all operators, required accounting separation for local and long distance services, set up a dual system of access using balloted pre-subscription and per-call selection, and determined that a non-discriminatory cost-based system would be used for setting interconnection charges.

According to the Resolution, competitive long distance services and thus, interconnection, would begin in 60 cities in January of 1997, 50 of them selected by the SCT and 10 by the new operators based on demand. By 1998, the number of cities would increase to a hundred, and 50 cities would be added each of the following two years, to reach 200 by January of 2000; finally, beginning January 1 of 2001, interconnection would be provided, based on demand, in any city that had a local exchange with routing capacity.

In June of 1996, for example, SCT issued technical plans on numbering and signaling, so that the new competitors, particularly those for the long distance service, would have certainty on the conditions for the non-discriminatory allocation of numbers, and on the signaling protocols that would allow the interconnection and interoperability of networks.

As part of the current revision of the *Federal Telecommunications Law* of 1995, SCT and the Comisión Federal de Telecomunicaciones (Cofetel) are considering increasing the percentage of direct foreign investment allowed in the telecommunications sector (Pedrero, 2001b; "Prepara Cofetel", 2001).

A report of the World Bank (1993) stated in this respect, "Progress in developing SCT regulatory capacity has been slow. It is evident that there was no clear consensus on the part of the Mexican authorities on the need for strengthening this regulatory capacity. Fears were expressed that a strong SCT might conspire against the adequate development of the private sector." (Cited in Ramamurti, 1994, p.13)
One of the issues being proposed as part of the revisions to the *Telecommunications Law of 1995* currently underway is the need to provide Cofetel power to sanction. Nevertheless, the power to grant licenses remains under the exclusive responsibilities of SCT, although Cofetel is expected to be able to modify such licenses (Celis Estrada, 2002).

Telmex proposed a rate of US$ 0.14 cents per minute, while the new long distance concessionaires wanted rates to be in the range of US$0.02 US cents per minute.

The approved charge for 1997 was higher than those charged in developed countries, such as New Zealand (US$ 0.0308), the United States (US$ 0.0271), Japan (US$ 0.0259) and Australia (US$ 0.0234), among others (Matus, 1996).

The negotiations for the 1999-2000 interconnection charge also required Cofetel's intervention. The Commission, based on the resolution of 1996, just converted the rate fixed then in pesos to its equivalent in dollars as of November of 1998. Together with the elimination of the surcharge, the rate fell from US$ 0.055 to 0.026 cents per minute, below the expected US$ 0.0315 cents planned in 1996 (Cofetel, 2000, p. 30).

This figure was calculated by Bellcore, which was selected by all long distance operators for this purpose.

In Mexico, injunctions or *amparos* can be filed by individual plaintiffs whenever a government action is deemed to violate the plaintiff's constitutional rights. The amparo stops the action from being implemented until a court rules on the merits of the case (OECD, 1999b, p. 256).

In December of 2001 Telmex reduced by 25% its interconnections rates for Avantel, Alestra, and Marcatel. These rates were reduced from US$ 0.0125 cents per minute to US$ 0.00975, beginning on January 1, 2002 (Osterroth, 2001, ¶1).

For an extensive discussion of interconnection requirements between fixed and mobile networks, see the ITU study by Arturo Briceño (2000).
In April of 2002 the US trade representative requested a dispute resolution panel against Mexico before WTO, arguing that Mexico was not fulfilling its commitment to open the telecommunications market to competition. The USTR supported its claim on three issues: the level of interconnection rates; Telmex's power as a dominant provider to set those rates; and the lack of discriminatory access to service providers using leased lines. The response of Mexican authorities, including Cofetel's, was once more that Mexico has fulfilled its commitments. The request of USTR was interpreted by authorities in Mexico as political pressure on the part of the American government to influence the revision of the Telecommunications Law (Osterroth, 2002b, ¶10).

Similarly, Telmex's representatives criticized the lack of openness of the American telecommunications market, to which Telmex has faced regulatory obstacles in trying to gain access to for more than four years (Osterroth, 2002c).

The revision of the Telecommunications Law is based on the following ten basic principles:

1. Promoting growth in teledensity, penetration, and connectivity of basic and advanced services, including poor rural and urban populations;
2. Providing support instruments to strengthen national integration and the growth of the telecommunications infrastructure;
3. Promoting the connectivity of education centers to the telecommunications network;
4. Facilitating access to improved telemedicine services;
5. Providing incentives for research and technological development in telecommunications and promoting modernization processes with high levels of competition;
6. Allowing technological convergence by simplifying processes;
7. Guaranteeing investors' rights to transparency, equity, and juridical certainty; promoting and providing incentives to competition through a clear regulatory framework;
8. Guaranteeing consumers' rights to access, quality, information, competitive prices, and choice in the provision of telecommunications services;
9. Revising the current Law to complement it, and address any current technical, administrative or judicial omission; and
10. Strengthening the operational capabilities of Cofetel as a regulatory entity (Corral, 2001).

A nominal variable is measured in terms of money, such as the amount of pesos, or U.S. dollars that are necessary to purchase or produce goods and services. In contrast, a real variable estimates the effects of inflation on prices and it is measured in terms of goods and services. It provides a comparison of the value of a quantity or...
basket of goods and services produced or purchased in successive years relative to the cost of the same basket at a specific point in time in the past (usually a year), which is considered a base-year (Nicholson, 1994).

26 Of the 25 long distance concessionaires approved, five have requested an extension to initiate operations (Axtel, Larga Distancia Internacional Mexicana–Ladimex–, Presto Comunicaciones, Unión Telefónica Nacional–Unitel–, and W. L. Comunicaciones and three others (B. Tel, Operadora Unefon, and VPN de México) have not begun their operations yet and the deadline to do so is the end of 2001 (Pedrero, 2001a).

27 Average international long distance rates between Mexico, the United States, and Canada have decreased by 55 percent from the end of 1996 to the second quarter of 2000 (Cofetel, 2000, p. 50).

28 The Mexican government retained 7 percent of the total capacity of the Mexican satellite system to provide social and national security services, such as global positioning (GPS), rural and mobile communications, using the L band. As part of the mobile and rural communications program of the SCT, small communities with populations between 100 and 500 inhabitants have been targeted and more than 11,600 satellite antennas were installed from 1997 to 2000 (SCT, 2001, pp.16-17).
CHAPTER 5
PERFORMANCE OF THE MEXICAN TELECOMMUNICATIONS INDUSTRY AFTER INSTITUTIONAL REFORM

Introduction
Institutional reform was implemented in Mexico under the understanding that it would improve telecommunications performance at a minimum in the key dimensions of network extension, price, and quality of service. This chapter examines the effects of institutional reform in the telecommunications industry in Mexico in the dimensions of connectivity, affordability, quality of service, innovation, and choice from 1990 to 2000.

The historical analysis compares the performance of the industry during the period of Telmex as a private monopoly (1991-1996) to that after the entry of new competitors into the sector (1997-2000). This comparison, however, needs to take into account the effects that the economic crisis of 1994 had on the performance of the industry during the last two years of the private monopoly. For this reason, the results of the private monopoly period are divided into two stages. The first stage spans from 1991 to 1994, when Telmex operated under the performance goals established in its Concession Title, that is, under the license issued by SCT; the second stage goes from 1995 to 1996, when the effects of the crisis were particularly felt. Whenever sufficient
data was available, a fourth period of time was also included. This period corresponds to the last five years of Telmex as a state monopoly (1985-1990) and precedes the other three.

The comparison of the four intervals intends to point out changes in performance that might be related to effects of privatization, of the economic crisis, and later, of the introduction of competition. It is important to point out that the following analysis does not intend to provide a causal nor a statistical analysis of performance. The main purpose of this chapter is to examine whether there have been improvements in the different performance dimensions, and if so, the extent of these improvements over time. I expect that the letters sent by consumers will reflect changes in performance in the five dimensions of connectivity, affordability, quality of service, innovation and choice. As such, consumer opinions about performance will be integral parts of their conceptualization of the public interest after institutional reform, the focus of this dissertation. To guide the comparison between performance results and the opinions expressed by consumers in their letters, which is presented in Chapter 6, I conclude the analysis of each dimension of service with a list of hypotheses on how I expect performance in each dimension to be reflected in the letters.

A. Achievements in Connectivity

One of the primary objectives of low-penetration countries with respect to institutional reform in telecommunications is to accelerate the pace of network extension, so as to rapidly increase the number of people with access to the service. Connectivity, however, is a necessary, but not sufficient condition for access; the cost of
access and of usage, that is, the affordability of the service, as well as the quality of service provided to consumers also influence the actual level of access available to the population. A telephone line that is out of order for a month or a payphone that requires the purchase of an unaffordable card does not provide access.

Table 5.1 presents the development of network extension in Mexico for fixed lines, wireless, rural lines, and wired-line payphones, as well as the advancement in the number of settlements served from 1985 to September of 2000. As Table 5.1 shows, since the privatization of Telmex, Mexico has considerably increased the number of fixed and mobile telephone lines, as well as the number of locations served. In a span of ten years, the number of fixed lines increased approximately 130 percent, and mobile lines grew from 45 thousand in 1990 to more than ten million by December of 2000. Even in rural lines, the indicator with the smallest increase, the number of lines tripled from those available in 1990.

It is important to point out, however, that although the absolute results are positive, they do not provide a complete picture of the pace and the distribution of the network extension efforts during the different periods. To capture these dimensions and better compare performance, it is necessary to use other parameters, such as the average growth rates in number of lines, the number of telephone lines per 100 inhabitants, or teledensity, and the distribution of lines across the territory. Performance on each of these parameters is discussed bellow.
Table 5.1: Evolution of network extension indicators in Mexico 1990-2000

<table>
<thead>
<tr>
<th>Indicator</th>
<th>State Monopoly Period</th>
<th>Private Monopoly Period</th>
<th>Competition Period</th>
<th>p/2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed lines (’000)</td>
<td>3,495</td>
<td>3,749</td>
<td>4,099</td>
<td>4,387</td>
</tr>
<tr>
<td>Per/year growth</td>
<td>7.3</td>
<td>9.3</td>
<td>7.0</td>
<td>10.5</td>
</tr>
<tr>
<td>Telmex - Telnor</td>
<td>3,563</td>
<td>3,749</td>
<td>4,099</td>
<td>4,387</td>
</tr>
<tr>
<td>Per/year growth</td>
<td>5.2</td>
<td>9.3</td>
<td>7.0</td>
<td>10.5</td>
</tr>
<tr>
<td>New local fixed concessionaires</td>
<td>49</td>
<td>263</td>
<td>436.7</td>
<td></td>
</tr>
<tr>
<td>Mobile lines (’000)</td>
<td>n.a.</td>
<td>45</td>
<td>121</td>
<td>303</td>
</tr>
<tr>
<td>Per/year growth</td>
<td>168.9</td>
<td>150.4</td>
<td>16.2</td>
<td>61.6</td>
</tr>
<tr>
<td>Rural lines (’000)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Wired-line Payphones (’000)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>46</td>
<td>n.a.</td>
</tr>
<tr>
<td>Per/year growth</td>
<td>72.5</td>
<td>14.2</td>
<td>23.1</td>
<td>39.1</td>
</tr>
<tr>
<td>Telmex- Telnor</td>
<td>46</td>
<td>n.a.</td>
<td>54</td>
<td>94</td>
</tr>
<tr>
<td>Per/year growth</td>
<td>72.5</td>
<td>14.2</td>
<td>23.1</td>
<td>39.1</td>
</tr>
<tr>
<td>New local fixed concessionaires</td>
<td>1.4</td>
<td>3.7</td>
<td>4.8</td>
<td>10.1</td>
</tr>
<tr>
<td>Locations served+</td>
<td>5,476</td>
<td>5,693</td>
<td>6,069</td>
<td>6,172</td>
</tr>
<tr>
<td>Fixed</td>
<td>5,476</td>
<td>5,693</td>
<td>6,069</td>
<td>6,172</td>
</tr>
<tr>
<td>Per/year growth</td>
<td>4.0</td>
<td>6.6</td>
<td>1.7</td>
<td>18.6</td>
</tr>
</tbody>
</table>

p/= Preliminary data as of December, 2000.
**= Includes wired public payphones with chip technology and wired shared phones in the program "Ladafon Telefono Compartido"

A.1. Cumulative average growth rates for network extension

Table 5.2 provides the cumulative average growth rates (CAGR)\(^3\) by service during the periods of state control over the monopoly, private monopoly, and competition. This table shows the disparities in the cumulative average growth of the different indicators, which ranged from a low 8.7 percent per year on average for fixed lines to an impressive 72.4 percent per year for mobile services during the 1990-2000 period. The majority of the indicators clustered around a seventeen percent cumulative average growth since 1990.

In general, the comparison of CAGR per period for the different indicators, illustrated in Figure 5.1, shows that during the first four years of the private monopoly period, Telmex achieved higher average growth rates than those of the last five years of the state monopoly. However, when considering the performance during the six years of the private monopoly, these growth rates rapidly decreased as a result of the negative impact of the economic crisis of 1995 and 1996, bringing down the CAGRs for all the indicators. The effect of the crisis on growth was so strong that payphones reported negative average growth rates during 1995 and 1996, and the CAGRs for fixed lines and locations served for the private monopoly period reached lower average rates than those achieved under state monopoly. By the beginning of the competitive period, the average growth rates of all the indicators began showing signs of recovery and, with the exception of rural lines, they have reached higher rates than those of the private monopoly period, as is clearly shown in Figures 5.1 and 5.2.
Table 5.2: Cumulative average growth rates in network extension by service (1985-2000)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>State Monopoly Period</th>
<th>Private Monopoly Period</th>
<th>Competition Period</th>
<th>CAGR 1990-2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed lines ('000)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3,495</td>
<td>3,749</td>
<td>4,099</td>
<td>4,387</td>
<td>4,847</td>
</tr>
<tr>
<td>CAGR per Period</td>
<td>State monopoly period=</td>
<td>8.9</td>
<td>Private monopoly (years 1-4)=</td>
<td>12.1</td>
</tr>
<tr>
<td><strong>Mobile lines ('000)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>45</td>
<td>121</td>
</tr>
<tr>
<td>CAGR per Period</td>
<td>State monopoly period=</td>
<td>n.a.</td>
<td>Duopoly period (years 1-4)=</td>
<td>67.5</td>
</tr>
<tr>
<td><strong>Rural lines ('000)</strong></td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n/a</td>
</tr>
<tr>
<td>CAGR per Period</td>
<td>State monopoly period=</td>
<td>n.a.</td>
<td>Private monopoly (years 1-4)=</td>
<td>17.3</td>
</tr>
<tr>
<td><strong>Wired-line Payphones ('000)</strong></td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>46</td>
<td>54</td>
</tr>
<tr>
<td>CAGR per Period</td>
<td>State monopoly period=</td>
<td>n.a.</td>
<td>Private monopoly (years 1-4)=</td>
<td>26.6</td>
</tr>
<tr>
<td><strong>Locations served+</strong></td>
<td>5,476</td>
<td>5,693</td>
<td>6,069</td>
<td>6,172</td>
</tr>
<tr>
<td>5,476</td>
<td>5,693</td>
<td>6,069</td>
<td>6,172</td>
<td>7,320</td>
</tr>
<tr>
<td>CAGR per Period</td>
<td>State monopoly period=</td>
<td>13.3</td>
<td>Private monopoly (years 1-4)=</td>
<td>18.9</td>
</tr>
</tbody>
</table>

p/ = Preliminary data as of December, 2000.
Figure 5.1: Cumulative average growth rate in telephone lines by period (1991-2000)
Figure 5.2: Comparison of CAGRs for telephone lines during the private monopoly and competitive periods

The increases in average growth rates, however, should not be considered the exclusive effect of competition and new investment in the sector. Improvements in the economic situation of the country, as well as the effects of regulatory decisions—such as the implementation of the calling-party-pays (CPP) regime in mobile telephony—among other factors, have also influenced the behavior of the market and contributed to the competitive period results. By the same token, it is important to point out that the high average rates of growth achieved by Telmex from 1991 to 1994 in all the network extension indicators were also influenced by several factors, such as Telmex's strategic
incentive of becoming the first provider in an area before competition began, and particularly by the network extension obligations included in its revised license (hereafter, Concession Title).

Most of the Concession Title targets set 1994 as the first important deadline for results in growth for fixed lines, payphones, and locations served. Telmex's new administration paid particular attention to fulfilling the targets as fast as possible, and in some cases, was able to exceed them. In fixed lines, for instance, the 12 percent target set in the Concession Title for the 1991-1994 period was met and slightly exceeded by Telmex until 1993; by 1994, however, the annual growth decreased to 11.4 percent, and plummeted to 3.6 and 0.3 percent, on average, during 1995 and 1996, respectively (see Table 5.1). According to Telmex, the decrease in network growth and in the general performance of the company during the crisis years was the result of the effects of higher inflation, the increase of the company's foreign debt caused by unfavorable exchange rates, depreciation charges, and the inability to increase rates (Telmex, 1995, p.3).

In view of the impact of the crisis and since Telmex had fulfilled most of the network extension goals established in the Title, the government seemed to ease the enforcement of the Title requirements in this area of performance. Similarly, to promote competition in the different markets and the introduction of new services, the government has not set specific targets for the new suppliers, in an effort to allow competitive forces to promote services as much as possible. It is still too early to foresee the impact of this policy on future network extension.
Analysis of CAGRs by Indicator

The analysis of each network extension indicator provides a more in-depth view of the growth trends during the 1991-2000 period. Even though increasing the penetration of fixed lines was among the targets set by the government in Telmex's Concession Title, this indicator had the lowest CAGR for the 1991-2000 period. It reached only a CAGR of 8.7 percent annually, a smaller percentage than that of the last five years of the state monopoly (8.9 percent). In a pattern common to all the network extension indicators, the CAGR for the years 1991-1994 shows improvement with respect to the results of the last years of the state monopoly period, followed by a fast decrease in growth during 1995-1996, the crisis period. This decrease in growth brought down the CAGR for the whole private monopoly period to only 7.9 percent, one percentage point less than during the state monopoly.

Beyond the direct effects of the economic crisis on the investment capability of Telmex, the company has pointed out the high number of disconnections as a justification for the slow growth rate in lines during the last years of the monopoly. Telmex states that during 1996 and 1997, the demand for new lines barely surpassed the number of disconnections due to non-payment of charges in 1996 (Telmex, 1996). This trend has continued even after the end of the private monopoly, as the ratio of disconnections to new lines is still high and seemingly increasing. In 1999, for example, one out of every three lines available for Telmex's new subscribers came from disconnections and in 2000, this number increased to 41 percent.

The end of the monopoly has improved the growth rates for fixed lines to a CAGR of 10 percent annually for the years 1997-2000 (see Figure 5.2), and the
introduction of competition in 1999, although recent, is already increasing the growth rates to a higher level than during the best years of the private monopoly period. Yet, the high rate of disconnection and the low level of telephone penetration (12.8 lines per 100 inhabitants by March 2001) indicate that there is still much to do in this area. Based on the robust demand for mobile services discussed below, it is highly unlikely that the market would be saturated so quickly. The apparent lack of demand for fixed lines may have more to do with rapid increases in prices, due in part to rate rebalancing, and/or low quality in Telmex's services. A complete answer to this riddle is beyond the scope of this dissertation, and will require an analysis of price elasticity and demand by state or smaller geographical area, among other things.

Compared to fixed lines, the growth rate for mobile lines is outstanding. This service reported the highest growth rates, and although it was also affected by the crisis—decreasing the CAGR from 67.5 percent in 1991-1994 to 51.2 percent in 1991-1996—, the service kept growing at double-digit rates every year. The CAGR for mobile lines from the time of privatization until 2000 also was the highest of all the services, reaching 75.2 percent annually. As in other developing countries, the rapid growth rate of mobile phones in Mexico is partly explained by the unsatisfied demand for other services, mainly fixed lines and payphones. Insufficient and/or inoperative fixed lines and payphones, together with the implementation of the Calling-Party-Pays regime (CPP) for mobile services and the introduction of value-stored card programs or "prepaid cards", prompted an increase in the use of mobile telephony as a substitute service. The rapid pace of growth is not expected to be tapered soon. As of April 30, 2001 there were near to 16.2 million wireless users (mobile and PCS), that is, about
16.6 percent of Mexico's total population, and Cofetel estimated that, at the current
growth rate, this number would increase to 19 million by the end of 2001 (Cofetel,
2001b, p. 16).

On the other hand, promoting growth in rural lines has been a more challenging
endeavor. Traditionally service operators have considered the provision of service to
rural areas as a non-profitable business, due to the high cost of rolling out the network
to these areas relative to the number of calls generated or received through them. Thus,
to promote roll out in these areas, governments usually provide the service directly or
grant subsidies as incentives for private operators to serve these areas, among other
strategies. In the case of Mexico, the Concession Title required Telmex to provide
services to small towns that were unattended, so that at least one phone booth or one
long-distance service agency existed in every community with more than 500
inhabitants by 1994. Mirroring the growth pattern of fixed lines, the growth rates in
rural lines peaked from 1991 to 1993 prompted by the Concession Title requirements,
then partially decreased in 1994, and suffered a sharp drop during the crisis years.
From 1995 on, the Concession's requirements for extension of rural telephony focused
on the speed of Telmex's response to subscription requests rather than on the number of
towns connected to the network. This factor, combined with the macroeconomic crisis,
may have influenced the subsequent decrease in performance.

The change in CAGR for rural lines during the competitive period, however, is
not easily explainable. In 1997 the growth rate in rural lines was 61.5 percent, the
highest among all the indicators excluding mobile, but it was followed by the lowest
growth rate of the competitive period (1.7 percent in 1998). The available sources
provide no explanation for this sharp fluctuation in growth, and the steadier growth rates for the other indicators during the competitive period make it difficult to assume that this drop might be related to macroeconomic factors.

The growth reduction does not seem to be related to lack of demand, either. Approximately 30,000 settlements with less than 500 inhabitants are being targeted by SCT and Telmex as part of Telmex's rural expansion plans, set by SCT every four years, and of the 1995-2000 National Plan for Development ("Convenio Telcel-SCT", 1996). As part of the government strategy to promote service for rural areas through competition, SCT has considered granting subsidies to any local and pay telephony supplier interested in providing service to marginal rural areas. According to Fulvio del Valle, CEO of the new local service provider Maxcom, the new fixed and mobile local service providers are interested in servicing the rural and suburban markets because of their potential demand, estimated at eight million lines during the next six years (Finsat, 2001a). Lack of data for 1999 and 2000 makes it impossible to confirm recent changes in growth rate, but it is expected that the entry of new competitors and the availability of subsidies will improve the growth rates for this indicator, as it has for payphones.

Payphones are an important form of access to the telephone network, particularly in low-teledensity countries, where private lines are either not available or not affordable for a large portion of the population. As with the other network extension indicators, the annual growth rates for this indicator increased during the first four years after the privatization, reaching its highest growth in 1993, with a 39.1 percent growth rate. The CAGR for payphones during the first 4 years of the private monopoly is only surpassed by the growth in mobile lines. From this point on,
however, the per-year growth began decreasing, and reached its lowest point in 1996 with a per year CAGR of -3.2 percent, the only negative growth among all the indicators for the crisis period. The sharp drop in the number of payphones installed during the crisis period might be partially explained by the simultaneous effects of several factors. Among them are limitations in capital resources during the recession, recurrent problems of vandalism,\(^5\) and Telmex’s business decision to upgrade its payphone network replacing traditional coin payphones with new ones employing microchip prepaid cards, a technological change supported by France Telecom, one of its foreign owners. As with the other indicators, the network extension requirements of the Concession Title strongly influenced the growth rates in payphones during the first four years. With the crisis, however, the rate of growth decreased its pace.

The introduction of competition in this market has had a slow, but clearly positive effect on the growth rates for this indicator. As shown in Table 4.8, the new local fixed concessionaires have just reached double-digit growth rates in 2000 and Telmex has even surpassed the highest annual growth rates of the private monopoly period. This late burst in growth had a clear influence on the CAGRs for the competitive period and the 1990-2000 period, reaching compounded average growth rates of 34.9 and 21.1 percent, respectively, the second largest of all the indicators.

Beyond these encouraging results, it is clear that much more needs to be done in this critical indicator. Among recent efforts to increase the access to phone lines through payphones, Telmex introduced in 1999 a multiparty line program called "Ladafón Teléfono Compartido" (Ladafón Shared Phone Line). This program consists of the installation of wired-line and wireless fixed phones in residential complexes and
public access areas that allow several families to receive calls and prepay for usage, without having to disburse any money for installation or monthly rent (Telmex, 2000a).

In rural areas, Telmex is also promoting shared lines and the use of private phone lines as payphones; it is also increasing the number of wireless payphones installed. As of December of 2000, 49 percent of the 625,593 wired-line payphones were shared lines, and the number of wireless payphones had surpassed that of wired-line payphones by a ratio of almost 1.5:1 for a total of 908,422 wireless payphones. By the end of 2000, Telmex reported a total of 1.5 million wireless and wired payphones (Telmex, 2001c, p.8).

The last indicator, locations served, follows the same pattern as the previous indicators, with the exception that the growth rate during the crisis is the second highest of the period, after mobile services, with a CAGR of 4.8 percent. After the end of the private monopoly the growth rates have almost equaled those of the best years of the private monopoly and the use of mobile technology is steadily increasing as a way to provide access in rural areas and small settlements.

In sum, the analysis of CAGRs shows the strong impact of economic forces on network extension. On the one hand the macroeconomic crisis negatively affected the growth rates of all the indicators; on the other, the introduction of competition in the different markets after 1997, among other factors, has expedited the recovery of growth rates in just a few years. Figure 5.2 shows that, with the exception of rural lines, the CAGRs obtained during the private monopoly period are rapidly being surpassed in the
competition period. Nevertheless, the results are mostly disappointing. The demand for telephone services, evident in the rapid growth rate of mobile telephony, remains largely unsatisfied after ten years of institutional reform in the sector.

Based on these results, I expect that connectivity to the network, including the speed at which the demand for connectivity is satisfied, will be a criterion that consumers in Mexico refer to often in their letters. I also hypothesize that consumers' complaints about connectivity will increase during the crisis years relative to the first years of the private monopoly as a result of the high number of disconnections.

**A.2. Results in network extension per hundred inhabitants**

Teledensity, that is, the number of telephone main lines installed per 100 inhabitants, is one of the basic indicators of network expansion. Traditionally, teledensity has focused on the number of fixed lines available or access channels; yet, the rapid expansion of wireless services has made it appropriate to consider also mobile lines as part of the cumulative penetration of service, in what the OECD calls access paths (OECD, 2001). As shown in Table 5.3, from 1990 to 2000 Mexico's fixed teledensity has almost doubled, from 6.4 main lines per 100 inhabitants in 1990 to 12.5 by the end of 2000, with a cumulative average growth rate from 1990 to 2000 of 6.9 percent annually.

In contrast, during the past decade, the number of mobile subscribers per hundred inhabitants in Mexico has increased by 178 times its 1990 size, with a CAGR for the 1990-2000 years of 67.9 percent annually. In fact, despite the large gap that existed between mobile and fixed penetration in 1990, the annual growth rate in mobile
Table 5.3: Penetration per 100 inhabitants and CAGR for fixed and mobile lines in Mexico (1990-2000)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Fixed lines</th>
<th></th>
<th>Competition Period</th>
<th>CAGR 1990-2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penetration per 100 inhabitants</td>
<td>6.4</td>
<td>7.0</td>
<td>7.8</td>
<td>8.6</td>
</tr>
<tr>
<td>Per/year growth</td>
<td>9.4</td>
<td>11.4</td>
<td>10.3</td>
<td>9.3</td>
</tr>
<tr>
<td>5 year CAGR (as a percentage)</td>
<td>1990-1995 = 8.5</td>
<td>1995-2000 = 5.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAGR per period</td>
<td>Years 1-4 = 10.3</td>
<td>Ec. crisis = -1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile lines*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subscribers per 100 inhabitants</td>
<td>0.08</td>
<td>0.19</td>
<td>0.37</td>
<td>0.45</td>
</tr>
<tr>
<td>Per/year growth</td>
<td>137.5</td>
<td>94.7</td>
<td>21.6</td>
<td>37.8</td>
</tr>
<tr>
<td>5 year CAGR (as a percentage)</td>
<td>1990-1995 = 56.5</td>
<td>1995-2000 = 80.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAGR per period</td>
<td>Years 1-4 = 48.3</td>
<td>Ec. crisis = 46.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile subscribers ('000)</td>
<td>Years 1-6 = 42.1</td>
<td>Competition period = 98.1</td>
<td>After CPP (1999-2000) = 79.6</td>
<td>44.7</td>
</tr>
<tr>
<td>5 year CAGR (as a percentage)</td>
<td>1990-1995 = 60.8</td>
<td>1995-2000 = 82.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAGR per period</td>
<td>Years 1-4 = 52.6</td>
<td>Ec. crisis = 48.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile subscribers ('000)</td>
<td>Years 1-6 = 44.7</td>
<td>Competition period = 100.7</td>
<td>After CPP (1999-2000) = 82.1</td>
<td></td>
</tr>
</tbody>
</table>

subscribers during the past years has been so great that mobile penetration has already surpassed fixed penetration, reaching a density of 14.3 subscribers per hundred inhabitants by December of 2000, compared to 12.5 in fixed lines. According to a recent study by Pyramid Research (2001), the gap between fixed-line and mobile penetration will increase even more in the next five years. Pyramid forecasts considerable growth in both types of lines, but expects that the growth in mobile penetration will be faster, reaching 40 percent at year-end 2005, while the forecast for fixed-line penetration by the end of 2005 is only 20 percent (2001, p. 2).

Figure 5.3 illustrates the fast increase in mobile penetration, particularly since 1996. The rapid development of the past years seems to be closely related to changes in the rate structure of mobile services that gave users more control over the costs of using this technology. Among these changes were the launch of prepayment plans in 1996, such as Telmex's value-stored cards and telephones programmed with limited air-time for calls; the introduction of discounts on incoming calls in 1997, and the adoption of the CPP modality in 1999 (Cofetel, 2001b).

The entry of new PCS concessionaires in 1999 was expected to accelerate even more the growth rates for mobile services. Pyramid projected that Telmex's new mobile branch, América Móvil, and the other fixed and wireless concessionaires would invest US$1.4 billion in mobile networks by the end of 2001, an amount representing 21 percent of the total capital expenditures in mobile networks for the Latin American region, surpassed only by Brazil (38%) (Pyramid Research, 2001, pp. 2-3).
Figure 5.3: Fixed-line and mobile penetration per hundred inhabitants in Mexico (1990-2000)

Notwithstanding the fast increase in mobile penetration, when compared to other OECD member countries, Mexico ranked last in cellular mobile penetration, with 21.68 subscribers per hundred inhabitants in 2001. Poland, the country with the second lowest number, had a penetration of 26.06 subscribers per hundred inhabitants; the OECD average is 64.1 (ITU, 2002).
The international comparison of Mexico's fixed-line penetration is not very favorable either. Relative to other Latin American and OECD member countries, Mexico's teledensity has remained low, ranking last among OECD countries (based on 1999 data) and just above half of the teledensity reached by Argentina and Chile, two countries that reformed their telecommunications systems in the early 90s, as Mexico did (see Figure 5.4). From 1991 to January of 2001, Chile increased its fixed-lines teledensity from 7.9 lines per 100 inhabitants to 22.1, while Mexico's teledensity only increased to 12.5 by 2001 from an initial rate of 6.4 in 1990.

Figure 5.4: International comparison of fixed-line penetration per 100 inhabitants as of January 2001.

Source: ITU (2001, Oct. 1)
As an aggregate measure, teledensity does not provide an accurate picture of how the lines are distributed along the territory of a country. In the case of Mexico, as in most countries, there are sharp contrasts in the distribution of connectivity through fixed lines (see Figure 5.5), ranging from teledensities of 33.4 fixed lines per hundred inhabitants in Mexico City to 3.6 fixed lines per 100 in the southern state of Chiapas. The most populated cities (Mexico City, Guadalajara in the state of Jalisco, and Monterrey, Nuevo León), along with other state capitals, tend to get most of the lines, while rural areas are mostly unattended to. Similarly, at the state level, states with the greater administrative and economic importance for the country, such as the Federal District (Mexico City) and the northern states where the maquiladora industry (assembly plants for final products, such as auto-parts, cars, clothing, and electronics) is mostly located, show the highest concentration of lines.

In contrast, the states with the lowest penetration rates, shown in white in Figure 5.5, are those with the lowest GDP per capita of the country. Campeche is an exception to this rule, since it has a higher GDP as a result of investments made by Pemex—the government-owned oil company—and of its sparse population. Notwithstanding its higher GDP per capita, Campeche shares with these states other characteristics that make them less attractive to providers or more costly to provide services to. Among these common features are high numbers of rural settlements with less than 2,500 inhabitants, large percentages of low-income population earning two or less minimum wages per month, as well as high levels of emigration and of indigenous peoples (INEGI, 2001). Thus, the distribution of telephone lines in Mexico seems to
Figure 5.5: Teledensity distribution in Mexico as of December 2000
respond mainly to economic factors, particularly income, with high levels of penetration in areas with higher GDP per capita, and low penetration in states with low GDP per capita.

The geographic features of many states with lower teledensity have also impeded progress by increasing the costs of line installation and service, a factor that combined with low-income levels and sparse small settlements make these areas economically unattractive for telecommunication providers. In the case of Chiapas and Oaxaca—the states with the lowest fixed teledensity both in 1990 and 2000—political factors may also be involved in the low levels of penetration achieved since the privatization of Telmex (see Table 5.4). These states have very active guerilla movements protesting the state of poverty and marginalization of segments of the population, and it is possible that the lack of significant advancement in penetration may be the result not only of investment risk on the part of Telmex and the new providers, but also a strategy of the Mexican government to maintain these pockets of discontent isolated from the rest of the country.

Although competition is expected to increase the teledensity rate for fixed and mobile services at the national level, its impact on the distribution of new lines at the state level may not be very noticeable in the next few years. Focusing on markets considered profitable, new local service providers such as Maxcom, Unefon, and Axtel began operations exclusively in urban areas, especially major cities, such as Monterrey, Guadalajara, Puebla, Toluca, Acapulco, and Mexico City. Similarly, the long distance
Table 5.4: Fixed telephone lines per 1,000 inhabitants in Mexico by state (as of December 2000)

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<tbody>
<tr>
<td>Chiapas</td>
<td>3,920,892</td>
<td>151.8</td>
<td>1.6</td>
<td>3.6</td>
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<td>Oaxaca</td>
<td>3,438,765</td>
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</tr>
<tr>
<td>Tabasco</td>
<td>1,891,829</td>
<td>117.4</td>
<td>3.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Hidalgo</td>
<td>2,235,591</td>
<td>155.7</td>
<td>2.8</td>
<td>6.1</td>
</tr>
<tr>
<td>Zacatecas</td>
<td>1,353,610</td>
<td>96.0</td>
<td>2.1</td>
<td>6.5</td>
</tr>
<tr>
<td>Campeche</td>
<td>690,689</td>
<td>53.1</td>
<td>3.3</td>
<td>6.6</td>
</tr>
<tr>
<td>Tlaxcala</td>
<td>962,646</td>
<td>77.1</td>
<td>2.1</td>
<td>6.7</td>
</tr>
<tr>
<td>Guerrero</td>
<td>3,079,649</td>
<td>238.2</td>
<td>3.3</td>
<td>7.0</td>
</tr>
<tr>
<td>Veracruz</td>
<td>6,908,975</td>
<td>544.2</td>
<td>4.0</td>
<td>7.0</td>
</tr>
<tr>
<td>San Luis Potosi</td>
<td>2,299,360</td>
<td>200.6</td>
<td>4.2</td>
<td>7.8</td>
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<tr>
<td>Michoacan</td>
<td>3,985,667</td>
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<td>Puebla</td>
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<td>475.4</td>
<td>4.1</td>
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<tr>
<td>Yucatan</td>
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<td>State of Mexico</td>
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<td>1,697.7</td>
<td>4.7</td>
<td>11.1</td>
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<tr>
<td>Quintana Roo</td>
<td>874,963</td>
<td>126.3</td>
<td>5.0</td>
<td>11.4</td>
</tr>
<tr>
<td>Aguascalientes</td>
<td>944,285</td>
<td>128.0</td>
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<td>Morelos</td>
<td>1,555,296</td>
<td>231.4</td>
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</tr>
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<td>Chihuahua</td>
<td>3,052,907</td>
<td>453.5</td>
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<td>13.6</td>
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<td>13.7</td>
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<td>402.9</td>
<td>7.7</td>
<td>13.9</td>
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<tr>
<td>Coahuila</td>
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<td>347.7</td>
<td>7.5</td>
<td>13.9</td>
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<tr>
<td>Colima</td>
<td>542,627</td>
<td>83.2</td>
<td>7.4</td>
<td>14.5</td>
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<td>Jalisco</td>
<td>6,322,002</td>
<td>1,141.9</td>
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<td>16.6</td>
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<td>Baja California S.</td>
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<td>16.6</td>
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<td>Baja California N.</td>
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<td>503.1</td>
<td>9.4</td>
<td>18.1</td>
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<tr>
<td>Nuevo Leon</td>
<td>3,834,141</td>
<td>897.8</td>
<td>11.6</td>
<td>21.8</td>
</tr>
<tr>
<td>Mexico City (DF)</td>
<td>8,605,239</td>
<td>2,967.3</td>
<td>18.3</td>
<td>33.4</td>
</tr>
</tbody>
</table>

Total: 97,483,412 | 13,368.5 | 6.4 | 12.5 | 6.9

* Data as of September 2001. Includes data for new local telephony concessionaries.
** Inhabitants per km2

Note: States ordered by their teledensity in 2000.
service providers Alestra and Avantel, which were recently granted concessions to provide local services, will target the largest cities and, particularly, their business markets ("Avantel pushes", 2001; Gori, 2001b).

Even when these companies are focusing on economically attractive markets, other factors, both internal and external to the companies, may limit their ability to fulfill their network extension forecasts. One predominant factor is the interconnection fee for local service. In 1998, after the local operators failed to reach an agreement, Cofetel resolved to establish a differentiated interconnection fee, based on the extent of the operators' network extension commitments. The differentiated fee tends to favor those providers that are committed to expand their networks to a larger number of both rural and urban locations along the country and to expend additional effort to provide local service to residential customers in urban areas. The provider with substantial commitments pays the other provider a reduced interconnection rate per minute (just 0.10 pesos per minute), while the provider with limited commitments is required to pay termination costs at 0.261 pesos per minute, the full rate established for long distance interconnection (Cofetel, 2000, pp. 32, 51). Only if the provider with limited commitments decides to expand its commitments, would it be authorized to charge the full interconnection rate and also to negotiate compensatory regimes.

This arrangement seems to fit appropriately with the government's universal service goal of providing any person access to basic telephone services, in the shortest possible time, through access to pay phone booths or residential service. The arrangement also provides new local service operators an incentive to expand their commitments, attracted by the symmetry in payments with existing providers with
similar commitments. Another attraction for new local service providers with substantial extension commitments is the potential additional profits resulting from the difference in interconnection fees with respect to the providers focused only on business services. These incentives, however, seem to contravene the government's commitment to the World Trade Organization (WTO) reference paper on universal service to promote competition through competitively neutral and nondiscriminatory mechanisms. The principles of neutrality and non-discrimination were also supposed to guide Cofetel's decisions regarding interconnection, based on the provisions of the Federal Telecommunications Law of 1995, the Resolution on the plan for interconnection with long distance public networks, and even Telmex's Concession Title.

Ironically, the incentives might actually work as a two-edged sword that may ultimately affect competition in the local market because of the link they create between local and long-distance interconnection fees. As stated above, from 1997 to 1999 Cofetel established long distance interconnection fees above cost while the rate rebalancing process between local and long distance was finalized. After a few years of political and legal pressures, in 2000 Cofetel reduced the long distance interconnection fees for 2001 by more than 60 percent, from 0.261 pesos per minute to about 0.125 pesos, and further reductions are expected.

This decision, made to promote competition in the long distance market, negatively affects the local service market in two ways. First, it decreases the gap between the reduced local interconnection fee for providers with substantial commitments and the full fee that reflects the long-distance interconnection rate, thus diminishing the incentive for providers to commit to substantial network extension
Second, and perhaps more importantly, the reduction in long distance interconnection fees can affect the viability of those local service providers that developed business plans relying on local and long distance interconnection fees as high as US $0.05 cents per minute to support the installation of new lines (DePalma, 2000). Lower interconnection rates can reduce their cash flows and, consequently, their ability to fulfill their commitments.

In fact, even before the reductions in long distance interconnection fees, some new local providers were already facing financial problems and others were behind in fulfilling their payments and expansion commitments. Unefon and Miditel are two cases in point. Both companies were granted concessions to provide fixed wireless local service in 1998. Miditel targeted rural communities with 500 to 2,500 inhabitants in states with low-teledensity such as Chiapas and Oaxaca, while Unefon focused on low-income population in urban areas (Romero, 1998; Luhnow, 2001). To fulfill their service plans, these two companies relied on international markets to finance their capital investments, but the volatility of the foreign capital market in 1999 and early 2000 affected their strategy—Miditel lost its partner Korea Telecom—and thus, their ability to fulfill their license payments. Even after a six-month extension granted by Cofetel to both companies in 1999, Miditel failed to pay on time, and as a consequence, lost its fixed wireless licenses in May of 2001, after a legal battle with Cofetel. Unefon, on the other hand, paid during the extension time but was penalized with a $13 million fine, a six-month delay in the start of its operations, and higher financing rates (Cortés, 1999; Fernández, 1999).
The case of these two companies underscores the difficult balancing act that Cofetel must play between promoting competition and universal service goals, and enforcing regulation. The penalties imposed by Cofetel on these companies worsened their already difficult financial situation, delayed Unefon's network extension plans and froze those of Miditel, and functioned as a punishment, albeit indirect, for relying on foreign capital. This government attitude poses a dilemma for potential and existing competitors, since the Mexican economy and, particularly the telecommunications industry, is increasingly linked to foreign capital investment, direct or indirect, and depends on it to grow. In fact, according to Jorge Alvarez Hoth, SCT's subsecretary of Communications, SCT is currently analyzing the possibility of allowing a higher percentage of foreign ownership in the telecommunications industry (Pedrero, 2001b). All these factors point out the need for a more flexible approach to enforcement by Cofetel that allows it to takes into account the impact of foreign markets on the industry's finances.

It is important to point out that, regardless of all these obstacles, investment in the telecommunications infrastructure keeps growing at double-digit rates (see Figure 5.6). During the last decade, US $27 billion were invested in the sector, and the sector growth was four times faster than the rest of the national economy (Cofetel, 2001b). Cofetel estimates the investment in the sector during 2001 will reach US $5,483 million, a 17.7 percent increase from investment in 2000, representing a cumulative average growth rate for the 1995-2001 period of 24.3 percent annually (Cofetel, 2001b).
Figure 5.6: Investment in the Mexican telecommunication sector (1995-2001)

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<tr>
<td><strong>Per capita:</strong></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Mexico</td>
<td>10.4</td>
<td>31.5</td>
<td>46.2</td>
<td>29.4</td>
<td>97.6</td>
</tr>
<tr>
<td>OECD area</td>
<td>138.3</td>
<td>152.3</td>
<td>181.5</td>
<td>157.3</td>
<td>13.9</td>
</tr>
<tr>
<td><strong>Per access channel:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>89.6</td>
<td>303.2</td>
<td>412.8</td>
<td>268.6</td>
<td>92.8</td>
</tr>
<tr>
<td>OECD area</td>
<td>264.0</td>
<td>305.7</td>
<td>350.9</td>
<td>306.9</td>
<td>15.3</td>
</tr>
<tr>
<td><strong>Per access path:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>55.5</td>
<td>226.7</td>
<td>241.8</td>
<td>174.6</td>
<td>45.3</td>
</tr>
<tr>
<td>OECD area</td>
<td>166.8</td>
<td>211.3</td>
<td>215.7</td>
<td>197.9</td>
<td>7.5</td>
</tr>
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</table>


Table 5.5: Telecommunications investment in Mexico relative to the OECD area
In pay telephony, for example, the permittees have committed to invest approximately 1,025 million of pesos to install nearly 150 thousand payphones in five years (Cofetel, 2000, p.62).

Compared to other countries in the OECD area, in 1999, Mexico ranked second, after the Netherlands, in investment as a percentage of PTO revenue (40.8%) and tenth on the share of gross fixed capital formation (GFCF) devoted to telecommunication investment (about 4.44% of GFCF compared to the average 3.5% GFCF for the OECD area), reflecting the investments that new long distance, fixed and wireless local, and mobile providers have recently made in infrastructure (OECD, 2001, pp. 92-93). Table 5.5 shows that even when, on average, Mexico's investment per capita, per access channel (fixed), and per access path (mobile subscribers and fixed channels) has tended to be lower in absolute numbers than that of the OECD area, in terms of growth rate it has surpassed that of the OECD for the 1997-1999 period. As long as the number of new service providers being granted licenses keeps increasing, it is feasible that Mexico may maintain these high levels of investment for a few more years.

In sum, the entry of competitive forces into the Mexican telecommunications market has had so far a positive impact on improving the country's level of connectivity. Yet, the financial and legal difficulties faced by the new competitors make it clear that competitive forces alone will not be sufficient to satisfy the large number of inhabitants that still lack access to telephone services in Mexico. The heterogeneity in the distribution of lines among states illustrated in Figure 5.5 is evidence of the challenge that Mexico still has to face in order to achieve universal service.
The concept of universal service was officially defined for the first time in Telmex's Concession Title. During the private monopoly period, Telmex was responsible for achieving this goal "according to its financial capabilities, to the demand for telephone services, and in accordance to [expansion] programs that it agrees upon with the Secretariat" (SCT, 1990b, p.22). Currently, rural telephony provided through satellite, trunking, or mobile telephony is the only service considered part of the universal service program. The only explicit funding mechanism in existence is directed to mobile service providers, which are entitled to receive a fiscal incentive for investing in rural telephony, while the other services receive support through government subsidies (OECD, 1998, p. 10).

Nevertheless, the entry of competition has made evident the need for creating a more transparent and competitively neutral mechanism to support the achievement of universal service goals, instead of providing government subsidies. The Mexican Congress is currently working on a new Federal Telecommunications Law that will include provisions for the creation of a universal service fund to support telecommunication services for low-income population and high cost areas beginning in 2002.

With reference to these provisions, Javier Corral Jurado, President of the Transportation and Communications Commission of the Mexican Senate, stated the Mexican Congress is clear about the importance of the telecommunications sector not only as part of the legislative agenda, but especially for the country's population. Corral points out that the telephone service should be added "to the basket of basic [services] for Mexicans, that is, that all citizens of this country would have housing, clothing,
food, education, and telephone [service]" (Finsat, 2001b). The placement of telephone service in the basket of basic services implies not only having physical access to a phone, but also for telephone users to have the financial ability to pay for the use of this service. In the next section, I analyze the performance of the industry, and particularly of Telmex, in providing affordable services to the Mexican population.

B. Affordability

The *American Heritage Dictionary* defines the verb "afford" as having sufficient "financial means for", that is, as "be[ing] able to meet the cost of", and also as "be[ing] able to do or bear without disadvantage or risk to oneself" (Costello et al., 1993, p. 23). For the purpose of this dissertation, the second definition is used when referring to the affordability of telephone services in Mexico because it emphasizes the relationship between the price of a good or service and the consumer's income.

According to Cooper (2001), the standard for affordability "should not be whether one can pay the price, but whether that price causes serious detriment, consequence, or inconvenience" (p. 1). This definition appears appropriate for the case of Mexico considering that, according to the Mexican Census of 2000, 56 percent of the employed population in the country earns less than twice the minimum wage per month, that is, less than 400 dollars a month (INEGI, 2001, p. 121). Although this sector of the population might earn enough to pay for telephone service, it is important to consider how much of a burden the price of access and usage of this service would impose on their average household budget.
Cooper (2001) points out two indicators to measure affordability of service in the United States: penetration rates and "burden". The discussion on connectivity already addressed penetration rates in Mexico, and pointed out a trend for teledensity to be higher in those states with higher GDP per capita. This section examines the evolution of rates for basic local, long distance, and payphone services after Telmex's privatization, paying particular attention to the way in which rate rebalancing affected the rates for local and long distance services. The impact of the current rates relative to the average income of the population is discussed as a quantitative measure of burden.

To facilitate the comparison between prices and income, the rates for the different services are expressed in nominal pesos, instead of adjusting them for inflation (constant pesos). A qualitative measure of burden is provided in the following chapter, as part of the analysis of the letters sent by consumers regarding the rates for telephone services and their affordability.

B.1 Evolution of Telmex's rates after privatization

In Mexico, rates for local service were kept low as a form of social policy of the state monopoly. This was achieved through cross-subsidization from revenues obtained from the sale of long distance services. When Telmex was privatized and in preparation for a competitive environment, the government required it to gradually eliminate the use of cross-subsidies through rate rebalancing. Meanwhile, to promote penetration, cross-subsidies were to be replaced by explicit support mechanisms, such as universal service
funds. Rate rebalancing allows rates in both local and long distance services to be set at or close to their respective incremental costs, usually resulting in increases in local telephone rates and decreases in long distance rates.

Telmex's concession title also established a price cap regime\textsuperscript{14} to regulate the price of a basket of basic services. Appendix A provides detailed information on Telmex's regime and how it has been implemented since 1991. The following section outlines the results of the process of rebalancing on local and long distance rates, as well as the most important changes in the rates for mobile and payphone services.

**Rate Rebalancing**

The concession title mandated that Telmex set rates for a basket of controlled basic services at a level that would allow it to recover at least long-run incremental costs for each service, so as to eliminate cross-subsidies among services (SCT, 1990b, p.31). Installation charges for new telephone service were to be reduced in both 1995 and 1996, while the price of local residential service was not allowed to be any higher than needed to recover its incremental cost. As for rural services, the concession required Telmex to set rates equal to those for local basic service, while the rates for local calls made in payphones operated by Telmex were to be equal to those for local measured service and for long distance calls equal to those for evening long distance rates.

Under these parameters, Telmex engaged in a process of rate rebalancing that, expressed in monetary or nominal terms, resulted in increases in the rates for local and long distance services, and as a consequence, for payphone calls also. When adjusted
for inflation, however, the rates for national and international long distance services have decreased considerably, particularly after the introduction of competition in the sector in 1997. According to Cofetel, in real terms, average prices for national long distance services have decreased more than 66 percent from 1996 to December of 2000. During the same period, the rates for long distance calls to the United States and Canada, the countries with the highest Mexican call outflow, decreased more than 60 percent, and long distance rates decreased 72 percent to other countries (Cofetel, 2001b).

Table 5.6 and Figures 5.7 and 5.8 show the evolution of rates for the different components of local residential and business basic services in Mexico from 1990 to October of 2000, expressed in nominal pesos. During this period, local residential and business rates had a cumulative average growth rate of 13.4 and 13.5 percent annually, respectively. From 1990 to 2000, installation charges for residential service increased at a low cumulative average rate of 2.3 percent annually. The slow increase was mostly due to the freeze in rate rebalancing during 1995 and 1996 mandated by the Ministry, but it was possibly influenced also by the requirement in Telmex's concession title to decrease installation charges in real terms during those two years.

Since the installation charge did not decrease in nominal terms from that applied in 1994, it is possible that the significant drop (CAGR of -45.5) in installation charges during 1997 was a delayed compliance with the mandated reductions for 1995 and 1996. The freeze on residential installation charges during the macroeconomic crisis,
### Table 5.6: Telmex’s local rates for residential and business customers (1990-2000)

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<td><strong>Installation charges (divided by 12)</strong></td>
<td>75.0</td>
<td>96.9</td>
<td>125.0</td>
<td>137.4</td>
<td>149.4</td>
<td>149.4</td>
<td>149.4</td>
<td>81.4</td>
<td>81.4</td>
<td>88.2</td>
<td>94.2</td>
<td>2.3</td>
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<tr>
<td>per year increase</td>
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<td></td>
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<tr>
<td><strong>Measured service (150 additional calls)</strong></td>
<td>45.0</td>
<td>50.3</td>
<td>58.8</td>
<td>64.5</td>
<td>70.5</td>
<td>77.6</td>
<td>113.6</td>
<td>167.6</td>
<td>181.1</td>
<td>196.1</td>
<td>208.5</td>
<td>16.6</td>
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<tr>
<td>per year increase</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Average monthly rent</strong></td>
<td>7.7</td>
<td>14.0</td>
<td>17.0</td>
<td>24.5</td>
<td>31.8</td>
<td>38.2</td>
<td>64.4</td>
<td>108.6</td>
<td>126.6</td>
<td>138.6</td>
<td>147.0</td>
<td>34.3</td>
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<tr>
<td>per year increase</td>
<td>81.8</td>
<td>21.4</td>
<td>44.1</td>
<td>29.8</td>
<td>20.1</td>
<td>68.6</td>
<td>68.6</td>
<td>22.7</td>
<td>9.5</td>
<td>6.1</td>
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<tr>
<td><strong>Average monthly total</strong></td>
<td>127.7</td>
<td>161.2</td>
<td>200.8</td>
<td>226.4</td>
<td>251.7</td>
<td>265.2</td>
<td>327.4</td>
<td>357.6</td>
<td>389.0</td>
<td>422.9</td>
<td>449.7</td>
<td>13.4</td>
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<tr>
<td>per year increase</td>
<td>49.1</td>
<td>20.7</td>
<td>2.8</td>
<td>6.5</td>
<td>5.4</td>
<td>23.5</td>
<td>9.2</td>
<td>11.9</td>
<td>8.7</td>
<td>6.4</td>
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<tr>
<td><strong>Installation charges (divided by 12)</strong></td>
<td>130.0</td>
<td>166.3</td>
<td>216.7</td>
<td>238.2</td>
<td>258.9</td>
<td>258.9</td>
<td>258.9</td>
<td>291.7</td>
<td>291.7</td>
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<td>per year increase</td>
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<tr>
<td><strong>Measured service (150 additional calls)</strong></td>
<td>45.0</td>
<td>50.3</td>
<td>58.8</td>
<td>64.5</td>
<td>70.5</td>
<td>77.6</td>
<td>113.6</td>
<td>167.6</td>
<td>181.1</td>
<td>196.1</td>
<td>208.5</td>
<td>16.6</td>
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<td>per year increase</td>
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<tr>
<td><strong>Average monthly rent</strong></td>
<td>21.9</td>
<td>35.6</td>
<td>39.2</td>
<td>48.0</td>
<td>56.3</td>
<td>59.4</td>
<td>83.0</td>
<td>140.2</td>
<td>160.1</td>
<td>190.6</td>
<td>198.0</td>
<td>24.6</td>
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<tr>
<td>per year increase</td>
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<tr>
<td><strong>Average monthly total</strong></td>
<td>196.9</td>
<td>252.2</td>
<td>314.6</td>
<td>350.7</td>
<td>385.7</td>
<td>395.8</td>
<td>455.4</td>
<td>599.4</td>
<td>632.8</td>
<td>678.4</td>
<td>698.2</td>
<td>13.5</td>
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<td>per year increase</td>
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* Includes 100 free local calls.

Note: Rates as of December of each year, except for 1998, which is as of September (1998/III Qr.). Rates in nominal pesos.

Source: Teléfonos de México (personal communication), Teléfonos de México (2000, Sept. 29).
Note: Rates as of December of each year, except for 1998, which is as of September (1998/III Qr.)
Installation is divided by 12 to show the cost of installation at a per month rate, following OECD methods.

Figure 5.7: Telmex's nominal rates for local residential service (1990 -1998)

Figure 5.8: Telmex's nominal rates for local business service (1990 -1998)
however, appears not to have been extended to the rates for residential measured service or monthly rent, which kept increasing during the whole 1990-2000 period at annual rates of 16.6 percent and 34.3 percent, respectively.

According to the data in Table 5.6, local business service, like residential service, experienced the lowest average increases in installation charges, which reflect the same freeze period (1995-1996) as residential services. Yet, in comparison, the increases in business installation charges were higher than those for residential installation, reaching a CAGR for the 1990-2000 period of 8.4 percent annually compared to 2.3 percent in residential service. During 1999 and 2000, however, the situation reversed, and residential installation charges began increasing again after a two-year freeze period, while business installation charges have been frozen in nominal terms since 1997.

Residential and business customers pay the same rate for measured service, and thus, the CAGR for both types of lines are the same, an average of 16.6 percent annually during the whole decade. Increases in monthly rent, on the other hand, were higher for residential than for business services. The price of residential monthly rent rose at an impressive 34.3 percent annually, while for businesses the monthly rent grew at a CAGR of 24.6 percent per year, about two thirds of that for the residential rate. It is possible that this difference in rent charges is related to the existence in the past of a larger subsidy applied to residential service than to business service. Thus, in order to rebalance the charge for residential monthly rent from its subsidized level to a level that reflects its incremental cost, Telmex would have had to impose higher increases in residential monthly rent throughout the rebalancing process.
During 1996, the last year of the private monopoly period, and 1997 there was a sharp increase in the CAGRs for measured service and monthly rent for both residential and business services, as the process of rebalancing resumed at an accelerated pace to prepare for the competitive period. According to Cofetel (2000), in real terms, from 1996 to March of 1998, measured service rates increased 33 percent, residential monthly rent increased 88 percent, and business monthly rent rose 37 percent (p. 51). In 1998, however, the rate of growth in the prices of all residential and business services decreased again to a rate close to that of 1995, and kept decreasing during 1999 and 2000, with the exception of residential and business installation charges. As a result, according to Cofetel (2000), the rates for basic rent and measured service have been reduced 17.3 percent, in real terms, with respect to their value in March of 1998 (p.51).

These reductions in CAGRs are, for the most part, the cumulative result of several factors, such as the end of rate rebalancing between local and long distance services, Telmex's strategy to prepare for competition in the provision of local service, and the concession title's requirement to reduce the price cap for the regulated basket at a quarterly rate of 0.74 percent to reflect productivity gains. In general, the evolution of rates for residential and business local services during the 1990-2000 period points out that residential consumers had easier access to local service than businesses did, but once they were in the network, usage of the service became cheaper for businesses than for individuals.
In the long distance market, the cumulative average growth rates were less pronounced than in the local market. As shown in Figure 5.9, from 1990 to September of 1998, the average national long distance rate, in nominal terms, increased at 14.2 percent annually; the rates for long distance calls to the United States rose 13.4 percent annually, and the price for calls to the rest of the world rose at a 9.3 percent rate annually. As it did in local services, the macroeconomic crisis forced a freeze in rate increases, although only during 1994.

Similar to the case with local service rates, Telmex's long distance rates experienced a sharp increase in 1996, just before the entry of competition in the market. The high level of inflation in 1995 and 1996, factored into the price cap formula for local and long distance services, contributed to this sharp increase. However, from 1997 to September of 1998, Telmex did not impose any more increases in the average rate for national and international long distance services, while local service rates kept increasing.

As discussed above, once the nominal rates are adjusted for inflation, the average rates for national and international long distance services, expressed in constant pesos, reflect considerable decreases from 1997 to March of 2001, compared to the applicable rates in 1996. As shown in Figure 5.10, taking inflation into account, from 1996 to 2001, the average national long distance rates decreased on average 22.8 percent annually; calls to the United States were 19.6 percent cheaper each year on average, and the price of calls to the rest of the world decreased by an average 26.2 percent annually.
Figure 5.9: Telmex's average long distance rates in nominal pesos (1990 - 1998)
Figure 5.10: Telmex's average long distance rates in constant pesos (1996 - March 2001)
Finally, Figure 5.11 illustrates the evolution in average rate per minute for local payphone and mobile measured services. As mandated by Telmex's concession title, the increases in rates for payphone calls are relatively close to those experienced in local measured service. During the 1990-1998 period, the average per minute rate for a local payphone call increased on average 21.1 percent annually. In contrast, the CAGR for mobile measured service increased at a very low pace during the same period of time (5.8 percent annually), the second lowest CAGR among all local and long distance services. It is possible that the slow rate of growth in mobile rates was due to the presence of competition in this market from the beginning of the period.

The rapid growth in penetration of mobile subscribers shown in Figure 5.3 above underscores the importance of improving the affordability of this service in Mexico. As discussed above, mobile penetration grew even faster after the introduction of value-stored cards, discount plans for incoming calls, and the calling modality "Calling Party Pays"(CPP) in 1999, to which all existing mobile subscribers were automatically transferred. The advent of value-stored cards had the added benefit of providing consumers better control over the expenditures required for telephone service. This payment modality has become so popular that by the end of 2001 about 90 percent of the mobile phones in Mexico are used under prepaid calling plans (Kirkman, 2002, ¶ 3). The apparent positive effect that the availability of these plans and payment regimes has had on penetration emphasizes the important role that affordability plays in increasing access. The most significant jump in penetration occurred after the introduction of CPP, which allows mobile subscribers to pay only for the calls they make, instead of paying for both incoming and outgoing calls.
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<tbody>
<tr>
<td>Local payphone call per year increase</td>
<td>0.10</td>
<td>0.10</td>
<td>0.13</td>
<td>0.14</td>
<td>0.16</td>
<td>0.17</td>
<td>0.25</td>
<td>0.44</td>
<td>0.44</td>
<td>21.1</td>
</tr>
<tr>
<td>Mobile measured service per year increase</td>
<td>1.35</td>
<td>1.35</td>
<td>1.37</td>
<td>1.39</td>
<td>1.41</td>
<td>1.53</td>
<td>1.85</td>
<td>1.98</td>
<td>5.8</td>
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Note: Nominal rates as of December of each year, except for 1998, which is as of September (1998/III quarter). Rates in nominal pesos.

Figure 5.11: Telmex’s average rates per minute for local payphone and mobile measured service in nominal pesos (1990-1998)
When CPP was introduced, fixed and mobile service providers agreed to freeze the cost of fixed-mobile interconnection until December of 2000 instead of revising that cost, and as a consequence, the final rates offered to consumers, every month. Freezing the rate for fixed-to-mobile telephone calls at 2.5 pesos per minute gave mobile providers a steady source of income that has kept increasing in size, as the number of mobile subscribers and minutes of usage continue to expand. From the 2.50 pesos per minute rate, Telmex receives 0.60 pesos per minute from mobile companies for billing and collecting, while mobile providers collect 1.90 pesos per minute from Telmex for terminating its users' calls.

Although in real terms the fixed per minute charge experienced a 13 percent decrease from May of 1999 to December of 2000, Cofetel considers that further reductions are necessary to reflect the international trend towards lower mobile charges (Cofetel, 2000, p. 33). As of August of 2000, Mexico had the second highest charges for the fixed portion of consumers' and businesses' mobile telephone baskets among OECD member countries, after the Czech Republic (OECD, 2001, pp. 186-7).

In an effort to further reduce the cost of mobile calls, Cofetel has exerted pressure on Iusacell and Telmex, the two largest mobile service providers in Mexico, to reduce the fixed-to-mobile rate to 2.10 pesos per minute, but both companies wanted to extend the 2.5 pesos rate for another six months and have been unable to reach an agreement ("Negocia Cofetel", 2000). It is important to point out also that while CPP reduced the cost of usage for mobile subscribers, it increased the cost to users wanting to call them. Even with the increases in residential measured service, fixed-to-fixed calls are still a lot cheaper than fixed-to-mobile calls. For instance, in 1999 a fixed-to-
fixed call from a residential telephone cost 1.31 pesos per call, while a fixed-to-mobile call cost 2.50 per minute. Consumers, for their part, are becoming more proactive about their discontent with current mobile rates. In August of 2001, the citizen's group "Users in Defense of Users" organized, using the Internet, a campaign to turn-off mobile phones for a day in protest against an announced increase in mobile rates (Gudiño, personal communication, August 24, 2001).

**B.2 The impact of rate rebalancing on consumers**

As expected, rate rebalancing has had an impact on the number of telephone subscribers facing non-payment problems and disconnection. The impact was made even stronger by the macroeconomic crisis that negatively affected the purchasing power and the available income of the population. In 1996, for instance, Telmex installed 475,481 new lines, barely surpassing the number of lines disconnected due to lack of payment (450,363 lines), and in 1997 the number of disconnections was higher than the number of new lines added (558,679 and 427,567, respectively) (Telmex, 1996, p. 7; Telmex, 1997, pp. 3, 12). In total, during 1996 and 1997, Telmex disconnected a little more than one million lines. In April of 1997, Telmex reported that 30 percent of its subscribers, representing about 2.6 million lines, were delayed in their payments. In the case of Mexico, the preliminary evidence supports the expectation that the impact of liberalization on disconnection in low-penetration countries is more severe than that in high-penetration areas.
But it is not the severe macroeconomic crisis alone that has provided a background for increased disconnections. Even following the end of the economic crisis and the rate rebalancing process, there has not been a respite in the number of disconnections. This is, perhaps, because the increases in nominal local telephone rates have continued and the financial situation of the majority of the population has not improved substantially. During 1999 and 2000, Telmex disconnected a total of 972,153 lines, which represents 36.8 percent of the total number of new lines added during those two years (Telmex, 2000a, p. 4; Telmex 2001c, p.6). The number of disconnections is just slightly lower than that of the 1996-97 period.

To address this problem, Telmex and the new competitors in the long distance, local, mobile, and payphone markets have resorted to several strategies to attract new subscribers and maintain the existing ones in the network. With the advent of competition in the long distance market, Telmex began to soften its attitude towards its indebted subscribers. Instead of terminating their telephone service, Telmex now provides indebted users with special terms for payment and allows them to receive incoming calls (Pérez, 1997b; Pérez, 1997c). It also introduced prepaid party lines using payphones, discount plans for long distance services, and a system of value-stored cards for basic local telephone service, called "Telmex Precisa", that allows users to control the number of outgoing calls made beyond the 100 free calls included in the monthly rent.

The new competitors have responded with similar strategies. In local telephony, the new providers are competing with Telmex by offering cheaper ways to gain access to their networks. For instance, by late 2000, Maxcom was promoting a rebate in the
cost of installation, and reductions in the charge for wiring and monthly rent to subscribers who contracted for the service for three years (García, 2000). Unefon offers its prepaid WLL service for a set-up rate of US $50 plus monthly rent of US $25 for 500 minutes of use (Fernández, 1999, ¶10); while its mobile service costs one peso per minute for local calls, plus the cost of the phone (about 1,499 pesos or US $149) (González, 2000). Mobile companies are also resorting to value-stored cards and prepaid plans as popular forms of access to their services.

It is important to point out, however, that while value-stored cards tend to reduce the cost of access, they also tend to increase the cost of usage. For example, Telmex's cheapest value-stored card for the service "Telmex Precisa" costs fifty pesos (about US $5.50, at an exchange rate of 9.1 pesos per dollar) and is good for 25 calls, for a total cost of two pesos per call (Telmex, 1999, ¶2). In contrast, the cost of a fixed-to-fixed local call was 1.31 pesos in 1999 using Telmex's post-paid residential service, about 35 percent cheaper. The Precisa plan also increases the cost of long distance service, as it imposes an additional charge for incoming long distance calls.

By the same token, the best discount plans offered by mobile service providers, such as Telcel (América Móvil-Telmex) and Pegaso, offer rates that are still many times more expensive than those offered in the United States. According to a comparative study done by the Mexican newspaper Reforma of mobile service rate plans offered in both countries, Mexican users pay on average 12 times more per minute of usage than their American counterparts (López, 2001b, ¶ 2). Even after the entrance of PCS competitors, mobile rates have remained high, perhaps as a consequence of the high level of demand for this service in Mexico. It is possible that the consolidation of the
mobile market into three or four strong competitors may finally incite a battle to reduce rates as a strategy to increase their market share. Differences in quality of service, however, may deter true competition from happening, according to the analyst Víctor Flores ("El inicio de", 2001, ¶ 9).

Value-stored plans provide the great advantage of control over expenses, but also impose certain limitations. Among them are the existence of restrictions on the type and number of services included, restrictions on entry for subscribers who are behind in their payments,17 as well as the inclusion, by default, of certain value-added services in the plan, such as voicemail in mobile service and caller ID in local service.

In payphones, technological modernization has improved the quality of service offered to users, but it also has reduced the access to payphones for low-income users. Payphones that only function with prepaid cards make access useless to those who do not possess a card when they need to make a phone call. Access for disadvantaged users is limited in two ways: first, they have a lesser degree of physical connectivity to the network; second, services offered on the networks tend not to reflect their needs. The latter seems to be especially relevant in the case of low-income rural and urban payphone users in Mexico. For example, the minimum cost of prepaid payphone cards has increased in the last few years from 10 to 30 or 50 pesos, which relative to the current minimum wage for Mexico City18 of only 37.40 pesos per day makes modern payphones, and thus pay telephony, inaccessible for users in the low-income and poverty range. For them, buying the cheapest card to make a call would require sacrificing almost a whole day's wage.
The entry of new permittees into the payphone market might provide a partial solution to this problem. Realizing the market niche that Telmex's prepaid card phones have left unattended, the new competitors are focusing on installing coin payphones and on using new technologies, such as the wireless local loop (WLL), to provide the service. The usage of wireless technology avoids the costly installation of fixed lines; yet, because of interconnection rates, among other factors, the competitors' costs per call are still above those of Telmex. For instance, in 1999, Aditel, one of the new competitors, charged 3 pesos per minute for a local call, while Telmex was charging 20 cents to 2 pesos per call, but it required the purchase of a prepaid card at a cost of 30 or 50 pesos. Coin-operated telephone service providers who are leasing lines from Telmex are facing a similar situation. Optel, for example, pays Telmex about 1.6 pesos per call, but resells them at 3 pesos (Osterroth, 2002c, ¶ 14). These rates are still too high to increase the access of disadvantaged users to the service.

Finally, with respect to the level of burden that access to telephone service represents for consumers, a recent study (Ríos, 2002a, 2002b) of the monthly expenditure on telephony made by consumers from the State of Mexico found out that an estimated 10 to 15 percent of their monthly income is destined to telephone services, which increasingly includes mobile telephony and even Internet service. According to the study, in the last few years, the popularity of mobile telephony has increased the amount of monthly income that consumers allocate to telephony from 160 pesos for fixed local service rent (including 100 free local calls) to 600 pesos on average per mobile phone (Rios, 2002b, ¶ 8). Consumers interviewed for this study considered the amount they spend on telephony as "high, but inevitable", due to their need to keep in
contact with other members of their families, to the lack of security in the city, and the
need for Internet connection as a working tool (Ríos, 2002a, 2002b). Jaime Chico
Pardo, Telmex's CEO, points out that in a country like Mexico with GDP per capita of
roughly $6,000 dollars, "the ability of people to pay for telecom and other services is a
crucial part of the equation. . . . The solution is to offer as many services as possible on
a prepaid basis" (Kirkman, 2002, ¶ 2).

In sum, the impact of rate rebalancing and increased competition on network
access for low-income users does not look very positive. Installation charges are still
high relative to the average wages of the low-income population, affecting their ability
to access the network. For those already in the network, payment problems raise the
threat of disconnection, since Telmex's new policy might only be temporary. Even the
user's ability to remain in the network by changing suppliers when being disconnected
from Telmex is being curtailed.

In 1998, Cofetel resolved to establish a database of subscribers that were
delayed in their payments for long distance service. The "black" list is available to all
the long distance carriers. Based on these data, service providers can determine the
financial status of their potential clients and make decisions on connection and
provision of services (Guadarrama, 1997). The rules for entering a debtor into the
database, however, also include provisions that protect consumers to some extent. For
instance, Cofetel's resolution (Cofetel 1998) forbids providers from immediately
disconnecting indebted subscribers, requiring providers to wait at least 30 calendar days
after the due date of the outstanding payment to register a subscriber in the database.19

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Although there is no database yet for local service providers, disconnection and future inability to gain access to the competitors' networks are still threats facing current and future low-income users.

The case of Mexico shows that advances in network expansion or the introduction of new technologies will not necessarily address the needs of the low-income population nor help in closing the access gap. The availability of telephone service is useless when the service cannot be used because of the high costs of payphone cards, installation charges, or basic rent, which force users to drop or remain out of the network. Based on the performance results described above, I expect that consumers will complain about rate increases, particularly for installation and local service, which make access to the service a higher burden to them. Similarly, since disconnections due to lack of payment have been a recurrent problem since the beginning of the economic crisis, I expect consumers to express their discontent about this practice as well.

Another factor influencing the level of access of the population to telephone service is the quality under which that service is provided. The evolution of this criterion of performance in Mexico after Telmex's privatization is examined in the following section.

C. Quality of Service

In this dissertation, the criterion of quality of service plays a very important role, as it is one of the areas of performance which I expected consumers in Mexico to have the most critical attitude towards in their letters to the editor. The examination of
Telmex's performance on this criterion is particularly important because this company is still the principal provider of local telephone service for most of the population. However, information on the quality of service provided by the new competitors is limited, and refers for the most part to problems that consumers have faced as competition began in the different markets, such as slamming in long distance services, and more recently, problems with the quality of mobile service.

Traditionally, quality of service has been evaluated using objective, that is, measurable indicators that assess the reliability of the network in at least eight areas of service: installation of service, operator handled calls, quality of transmission, network call completion, trouble reports, payphones, and billing accuracy (Milne, 1997; NARUC, 1992). Quality of service may also be evaluated using subjective or qualitative measures. Subjective measures of quality, often compiled through surveys, monitor the level of consumer satisfaction with the service provided, particularly with customer service when employees personally interact with the customer (e.g. courtesy of employees).

Thus, the quality of service performance of a telecommunications operator depends on both the technical and human resources it utilizes in rendering service. Based on these resources, Michael Clements (2001) identifies two categories of service: (a) equipment and system-oriented and (b) people and process-oriented. Equipment and system-oriented quality refers to investments in network assets necessary to provide consumers with reliable transmission and advanced services. People and process-oriented quality refers to investments in staff (quantity and training) and internal processes that support and augment the provision of services (Clements, 2001, 5-6).
The relative importance given to each of these two categories of service, and thus, the amount of investment destined to them are influenced by market factors, such as economic incentives, as well as by strategic business decisions, regulatory mandates, and increasing competition (Banerjee, 2001; Clements, 2001). In his analysis of telephone quality-of-service in the United States from 1991 to 2000, Clements found out that companies gave priority to long-term investment in infrastructure, resulting in improvements in equipment-oriented quality measures, while people-oriented quality measures consistently declined during this period. Of all the people-oriented measures he included in his study, consumer complaints to state and federal regulators were the only indicator that increased (2001, p.13). Claire Milne (1997) points out in this respect that "at any one time, only a few dimensions of service quality tend to be of public interest. The consequent focus on these may divert management attention from other aspects and lead to the next problem area(s)" (1997, p. 195).

The performance of the privatized Telmex on quality of service appears to have followed a similar trend to that of its American counterparts. The regulatory mandates of Telmex's license and the business strategies of the company emphasized equipment-oriented quality measures over people-oriented ones, since most of the problems with service stemmed from an old and unreliable network. During the private monopoly period the company engaged in technological modernization of the network, such as digitalization of switches, the introduction of fiber optic for its long distance network, and the use of prepaid cards in pay telephony. The process of digitalization began before the privatization, accelerated after 1991, and in recent years reached a 100 percent level in the local and long distance networks (Telmex, 2001a).
As expected, the substitution of digital for electromechanical and analog switches improved the quality, speed, and reliability of service and allowed the introduction of new services, such as third party calls, caller ID, and call waiting beginning in 1995, which increased consumer choices (Telmex, 1996, p. 11). The introduction of automatic systems ameliorated Telmex's performance in operator assistance and repair service. During the private monopoly period, Telmex also reorganized the operations of installation and repair centers, opened 36 more new centers for a total of 186, and reduced the number of pending applications for service and the time required to repair faulty lines. Notwithstanding these improvements, disruptions in service continued to be excessive due to the obsolescence of what was still a great portion of the company's outside plant.

In accordance with the Concession Title mandate, the company also invested in training of its human resources. Telmex has provided courses to its employees in the areas of technology, marketing, and sales through Inttelmex, its technological institute. According to the company, from 1991 to 1999 it provided an average of two courses per employee per year, and over time, it also has increased the average level of education of its employees from six years in 1990 to fourteen years in 1999, a level Telmex claims is equivalent to that of employees in the "most competitive companies at the international level" (Telmex, 2000a, p. 9).

Shaping the employees' attitudes to be more service-oriented appears to have been a slower and more difficult challenge faced by Telmex's new administration. Three years after privatization, Marie Rouland, France Telecom's general director for Mexico, Latin America and the Caribbean, one of the international partners of Telmex,
stated in this respect: "The problem is training. It's real people, and we have a lot of
difficulty in convincing them to be more commercial and more efficient" (Bleurs, 1994,
p. 19). To improve its employees' performance, Telmex and the telephone union agreed
to follow a Program of Incentives for Quality and Productivity in 1992 so as to
guarantee that the targets set by the company and the regulator would be met ("Evaluó
la SCT", 1993). In an effort to improve its image with customers, Telmex also
established the Center for Monitoring Customer Service (CESAC), where subscribers
can complain about lack of attention and illicit acts performed by employees, such as
requesting tips for fixing a line (Cofetel, n.d.a). No information has been found on the
success of CESAC or the number of complaints received.

Similar to the results in connectivity and affordability, Telmex's performance in
quality of service since 1991 has been influenced by the mandates on quality of service
included in the revised license. The next section presents the quality-of-service
mandates included in Telmex's Concession Title and examines the company's
performance on some of these indicators.

**Telmex's quality-of-service indices and performance since 1991**

Telmex's Concession Title established specific quality-of-service standards and
provided the Ministry of Communications, and later Cofetel, the authority to enforce
them by imposing penalties for non-compliance. The quality standards set by SCT
clearly gave priority to objective indicators directed toward improving Telmex's
performance in equipment-oriented quality. Three quality indices, still in effect, were
established to regulate Telmex's performance: (a) an index for quality of basic services
(ICAL); (b) an index for service continuity (ICON), and (c) an index for private lines and circuits (ICIRC). The standards included in ICAL measure performance on pay payphones, network call completion (dial tone delay, percentage of local and long distance calls completed on the first attempt), and operator handled calls (repair service, directory assistance, and toll operator assistance). ICON's standards measure the percentage of lines with failure, as well as the percentage of repairs performed within 24 hours and within a period of three days. Finally, ICIRC includes standards for installation of service and repair time for private lines and private circuits. Besides these indices, the Title includes additional requirements to improve areas in which Telmex's service had traditionally been weak, such as accuracy of billing, repair service, and dispute resolution.

To provide an incentive for Telmex to reduce delays in repairing line failures, SCT established a system of rebates that Telmex has to pay to customers whose service is interrupted for more than 72 hours after being reported by the customer, even when the interruption is the result of acts of God. Similarly, any failure by Telmex to meet the quality-of-service benchmarks set by SCT results in refunds to subscribers of a percentage of their basic fees. For instance, if by the end of any year Telmex does not meet the ICAL benchmark stipulated for an operative region, it is compelled to pay a rebate equivalent to a one month basic fee, for each line in service within that region. If Telmex is unable to meet during a prolonged period of time the targets for quality of service set by SCT, the Ministry may have sufficient reason to rescind Telmex's license (SCT, 1990a, p.37).
The Title set the benchmarks for the three indices that Telmex would have to meet from 1991 until December of 1994. The Ministry reserved for itself the authority to modify the indices, as well as the manner in which the benchmarks for the indices were to be calculated. From 1995 onwards, and every four years, Telmex is required to submit for the regulator's approval the minimum quality of service benchmarks to be achieved during the next four years. Figure 5.12 illustrates the benchmarks and actual performance of Telmex in each of the three indices from 1990 to 1998.

Based on the information provided in Figure 5.12, Telmex’s actual performance has fulfilled and even surpassed the targets set by the regulator for the three indices. The only two exceptions were for ICAL in 1990 and ICIRC in 1993. The difference between the target and Telmex's actual performance for ICAL in 1990 was just about one percentage point; in contrast, the difference between the target and the actual ICIRC performance in 1993 was more than 34 percentage points. The lack of actual results for ICIRC previous to 1993 makes it difficult to point out trends in Telmex's performance for the ICIRC indicators of installation of service and repair time for private lines and circuits.

In examining Telmex's performance for the 1990-1998 period, it is important to point out that the targets set for 1995 to 1998 for the three indices are significantly lower than those set for 1994. As in the case of connectivity and affordability, Telmex's performance on quality of service was impacted by the macroeconomic crisis of 1994. The negotiation of a new set of quality targets for the 1995-1999 period came about in 1994, as the crisis was developing. To respond to Telmex's more constrained finances,
Figure 5.12: Evolution of Telmex’s performance on quality of service indicators (1990-1998)
SCT approved a downward adjustment in the targets. The ICON target set for 1995 reverted to a level close to that set in 1991; the 1995 target for ICAL was even lower than that set for 1990, and for ICIRC the 1995 target was identical to the 1992 level.

The fact that Telmex proposed setting lower targets for the 1995-1999 seemed to imply that the company considered itself unable to reach any target set above the 1994 level. In fact, Telmex's actual performance for the three indices in 1995 was lower than in 1994. Performance on ICIRC dropped by 1.1 percentage points; ICAL fell by 1.4 percentage points and ICON dropped by 2.3 percentage points in 1995 relative to the 1994 results. Yet, the performance achieved by Telmex in each of the three indicators for 1995 is at the level of or superior to the target set by SCT for 1994.

For instance, Telmex's actual performance in ICON during 1995 (89.9) was two percentage points higher than the 1994 ICON target. Following this trend, Telmex also surpassed the targets approved by the regulator for 1996 and 1997. These results seem to indicate that Telmex might have been able to maintain at least the level of the 1994 targets, instead of having to reduce them by as much as 20 percentage points. It is possible that the steep reduction in the target levels was due to an overestimation of the impact that the crisis would have on the company's finances and performance and, that in view of this situation, Telmex made an effort to keep its quality of service as high as it was in 1994.

In fact, the targets are slowly returning to the level reached just before the crisis, with the exception of the target for ICAL. As illustrated in Figure 5.12, the drop of the ICAL target from the 1994 level to the 1995 level was more drastic than that experienced by the ICON index. This implies that, at their current pace of recovery, it
will take much longer for the ICAL targets to reach at least their 1994 level than for the ICON targets. In actual performance, Telmex has almost reached or surpassed its 1994 levels, although its performance on ICON decreased from 1997 to 1998. Based on the difference between each year's target and the actual performance after 1995, Telmex tended to have a better performance on the quality of service index (ICAL) than on continuity (ICON).

As for Telmex's performance on the different indicators included in the three indices, the available data is limited. Performance results were not reported in Telmex's annual reports until 2001, when it was forced by Cofetel to make available to the public a report of its quality performance at the retail and wholesale level, using disaggregated quality indicators, as a result of being designated an operator with substantial market power (Cofetel, 2000, p.28). Newspaper sources helped filling out some of the gaps, reporting whenever Telmex failed to meet the quality targets and paid refunds to its customers. In 1992, for instance, Telmex met or surpassed nine of the eleven indicators at the national level, with the exception of answering operator assistance calls within 10 seconds and the percentage of lines with failure reported. At the regional level, Telmex failed to reach the ICAL target for Mexico City and had to reimburse subscribers 11.9 million pesos ("Evaluó la SCT", 1993).

According to the OECD (1999b), Telmex's quality of service declined after 1994 compared to other member countries. While in 1994 Mexico was 23rd out of 27th countries reporting answer seizure rates (that is, the percentage of international calls
that seize an international circuit and are answered at their destination), by 1999 it had fallen to 27th out of 29th, with only 5 out of every ten international calls being answered at their termination points (OECD, 1999b, p. 298; OECD, 2001, p.227).

The data shown in Figure 5.12 brings an important question to mind. If Telmex was able to continually surpass the targets set by the regulator, does it mean that it is performing better than expected or that the targets are too lenient? To evaluate the stringency of the targets established for the different indices it would be necessary to compare them to those established in other countries. Regrettably, this comparison is not possible because of lack of comparable data at the aggregated level. The indices included in the Concession Title represent the aggregated efficiency in the provision of telephone service, based on the individual indicators. Meanwhile, other countries tend to evaluate and report their quality-of-service performance based only on specific indicators, and do not set targets for aggregated indices. It is possible however, to compare Telmex's performance on some of the indicators included in ICON and ICAL to the level required or achieved in other countries. Table 5.7 shows the performance of Telmex in some of these indicators for the years 1990, 1998, and 2000.

Although some of the data for 2000 was unavailable, it is clear that there has been considerable improvement in Telmex's performance in all these indicators compared to the 1990 levels. In local service, the most remarkable improvements are in the indicators of percentage of line failure, average waiting time for a new line, and the number of payphones out of service. From 1990 to 2000, the percentage of line failure decreased on average 17.8 percent annually, while the average waiting time decreased
<table>
<thead>
<tr>
<th>Indicator</th>
<th>1990</th>
<th>1998</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local Service</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Index of Service Continuation (ICON)</em></td>
<td>84.7</td>
<td>91.4</td>
<td>N/A.</td>
</tr>
<tr>
<td>Line failure (%)</td>
<td>13.5</td>
<td>02.8</td>
<td>01.9</td>
</tr>
<tr>
<td>Repair within 24 hours (%)</td>
<td>50.1</td>
<td>80.4</td>
<td>74.3</td>
</tr>
<tr>
<td>Repair within 3 days (%)</td>
<td>80.0</td>
<td>94.0</td>
<td>N/A.</td>
</tr>
<tr>
<td>Average waiting installation time (months)</td>
<td>23.9</td>
<td>01.0</td>
<td>01.1</td>
</tr>
<tr>
<td><em>Index of Quality of Service for Basic Service (ICAL)</em></td>
<td>89.6</td>
<td>97.8</td>
<td>N/A.</td>
</tr>
<tr>
<td>Dial tone within four seconds (%)</td>
<td>94.3</td>
<td>99.9</td>
<td>99.9</td>
</tr>
<tr>
<td>Call completion on first try (%)</td>
<td>92.0</td>
<td>98.3</td>
<td>N/A.</td>
</tr>
<tr>
<td>Out-of-service payphones as a percentage of the total number of payphones</td>
<td>16.5</td>
<td>01.9</td>
<td>01.6</td>
</tr>
<tr>
<td>Operator assistance calls answered within 10 seconds (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>90.0</td>
<td>92.6</td>
<td>N/A.</td>
</tr>
<tr>
<td><strong>Long Distance Service</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Index of Quality of Service for Long Distance (ICAL)</em></td>
<td>90.0</td>
<td>98.1</td>
<td>N/A.</td>
</tr>
<tr>
<td>Answer seizure (international calls answered at their destination point at first try) (%)</td>
<td>90.0</td>
<td>99.3</td>
<td>N/A.</td>
</tr>
<tr>
<td>Toll operator assistance calls answered within 10 seconds (%)</td>
<td>90.0</td>
<td>95.3</td>
<td>N/A.</td>
</tr>
</tbody>
</table>

Source: OECD (1999b, p. 288; 2001); Telmex (2001c). N/A=Non available

Table 5.7: Comparison of Telmex's performance on specific quality of service Indicators (1990, 1998, 2000)

Improvements in these indicators are closely linked to the process of network modernization and the level of investment in network equipment. Improvements in the number of repairs performed within 24 hours were significant, increasing from 50 to 80 percent in eight years. Nevertheless, this is the only indicator of those with data.
available for 2000 that actually worsened from 1998 to 2000, with an average decrease of 3.9 percent during these two years. The fluctuations in performance for speed of repair, one of the indicators that require human intervention, appear to confirm Milne's assertion that quality improvements brought about by investment in human resources tend to be less permanent than those made in capital.

Compared to other OECD member countries, Mexico's performance is mixed. In 1999, for instance, of the 16 countries reporting percentage of repairs performed within 24 hours, Mexico ranked 15th, with 73%, followed by Canada. In contrast, this same year Mexico had the lowest number of faults per 100 access lines (2.2 faults) among the 12 countries reporting results for this indicator (OECD, 2001, pp. 221-222). By comparing Telmex's performance in Table 5.7 to the quality of service standards suggested by the National Association of Regulatory Utility Commissioners (NARUC) of the United States for telecommunications operators in this country (NARUC, 1992), it is possible to get some idea of how close Telmex's quality of service (QoS) is to the levels required in developed countries.

Similarly to the international comparison, the comparison of Telmex's performance to NARUC's standards brings about mixed results. Telmex's QoS surpasses NARUC's standards for operator handled calls (92 and 95 percent within 10 seconds, compared to 85 percent within 10 or 20 seconds for NARUC), local and toll call completion (NARUC sets a 97% completion objective compared to the 98 percent or higher achieved by Telmex), and customer trouble reports (NARUC's objective is 6 reports per 100 lines, while Telmex reached 2.2 per 100 lines in 1999).
In other indicators, however, Telmex's performance is significantly below the standards suggested by NARUC. For instance, while NARUC sets its objective for primary service installation at 90 percent installed within three days, Telmex's average installation time is one month, a rate that only the Czech Republic (38 days) and Hungary (58 days) failed to surpass, among OECD countries (OECD, 2001, p. 211). By the same token, Telmex's out-of-service clearing time (that is, the number of hours it takes to repair a problem from the time it is reported to the company) is lower (74.3%) than NARUC's standard (90%). As for dial tone, Telmex has reached a high level of performance with 99.9 percent within four seconds. NARUC sets a similarly high standard (98%), but its standard is more stringent, as it requires dial tone within three seconds, instead of four. These results suggest that Telmex has reached internationally competitive levels in some of its QoS standards. There are areas, however, in which more stringent targets need to be set, such as installation time and out-of-service clearing time.

One area of quality of service that has been a constant problem for Telmex is billing accuracy. This, however, seems to be an international trend. According to OECD (2001), billing is one of the areas that consumers complain and inquire most about in member countries such as the United States and Germany. In the case of Mexico, most of the complaints are generated by measured service and incorrect charges for calls. Like other services, measured service benefited from digitalization of the equipment, which has allowed since 1998 the provision of itemized billing, also called detailed measured service (SMD), for residential customers, at the request of the user. SMD can provide the customer detailed information about the number of calls
made and their duration, as well as the time and day the calls were made. This
information is provided free to the customer over the phone or at Telmex's business
offices, but it is charged for if the customer requests the charges to be itemized in his
bill. Similarly, for business customers, Telmex established Si@na, a billing analysis
system that allows customers to access their account database over the Internet.

These advances in the billing process were expected to reduce customer
complaints for this indicator. But, access to more detailed information also allowed
consumers to better monitor the charges appearing in their bills, actually generating an
increased number of complaints about this service. As illustrated in Figure 5.13, from
1997 to 1998, the total number of complaints against Telmex submitted to the
Consumer Protection Agency (Profeco) increased by 62 percent, from 23,810 in 1997 to
38,572 in 1998, with most of the complaints being about measured service (Profeco,
personal communication, December 13, 1999). As a response, in 1999, Cofetel began
to randomly audit Telmex's lines around the country to verify that the 100 free calls
included in residential measured service and the charged calls were measured
accurately.

As part of this effort, Cofetel, the Federal Consumer Protection Agency
(Profeco), and the Ministry of Commerce and Industry Promotion (Secofi) are working
on designing equipment that would allow consumers to measure the number of calls
made from their phones (Navarrete, 1999). This technology would be particularly
useful to consumers, since they lack any formal means to prove to Telmex that the
charges for measured service are incorrect. No information was found regarding
Telmex's opinion about the meter, its reliability, or its acceptance as evidence in billing
disputes. In the meantime, consumers are legally required to pay the full amount of their bills, even when the charges are being disputed, to avoid disconnection.\textsuperscript{22}

The number of complaints submitted by consumers against Telmex was still in the thousands by the end of the 90s, but has significantly decreased with respect to the number of complaints submitted during the first three years after privatization. Relative to the number of fixed lines installed the number of complaints has also decreased over time. It is important to point out, however, that before submitting a complaint before
Profeco, consumers must try to solve the problem directly with Telmex. Thus, the numbers shown in Figure 5.13 represent only formal complaints of consumers that were not able to solve their disputes with Telmex. The number of complaints received by Telmex is not published, but according to Profeco, based on 1999 data, Profeco registered 1.4 complaints per thousand consumers that complained to Telmex directly (Profeco, 2000).

Consumer complaints are not exclusively directed against Telmex. Long distance service providers and, more recently, mobile service providers have also been criticized for their quality of service. In long distance, the main problem has been slamming, that is, the unauthorized change of a subscriber's long distance service provider. According to Profeco's data, in 1998, consumers registered 8,509 complaints against Alestra and 2,398 against Avantel, Telmex's two strongest competitors in long distance, and slamming was the main area of complaint (personal communication, December 13, 1999). These numbers represent an important increase from the 192 complaints registered against Alestra in 1997, and the 311 complaints registered against Alestra (Profeco, personal communication, December 13, 1999). Cofetel sanctions companies for slamming practices and forbids long distance providers from registering consumers that have been slammed into the list of indebted consumers mentioned above.

Finally, in mobile services, quality of service has deteriorated in the last couple of years. The exponential growth in mobile subscribers since the introduction of the CPP regime in 1999 resulted in an increased number of dropped calls, dial-tone delay, and problems with call completion, particularly in the service provided by the two
major operators, Telcel, Telmex's mobile company, and Iusacell (Hernández, 2000).

Several factors contributed to this decrease in quality. First, the increased number of mobile users caused saturation of the infrastructure, not only as a result of the increased number of calls, but also because CPP gave users the incentive to leave their phones on to receive calls, which implies that lines remained seized by a particular user for a longer period of time. Second, technological factors affected the operators' ability to complete calls. Among these factors were the diversity of mobile telephones used by subscribers, the transition from analog to digital technology, signaling problems in interconnection, and limitations on the ability of the mobile companies to install more radio antennas in urban areas, due to building restrictions and opposition from local authorities and neighborhood community groups.

To address these problems, the mobile service industry will invest more than 1.5 billion dollars in infrastructure to improve service, and it is working on collocation plans for the existing antennas ("La fiebre", 2000). Cofetel and the mobile providers also agreed to establish a "Quality Norms System" in 1999. This system sets quality indices for the mobile industry; establishes a process of verification; sets monetary penalties for lack of compliance, and mandates the companies to compensate affected subscribers, either through rebates to its regular subscribers or free air-time to value-stored card customers.

The verification program was initially established to evaluate mobile operators—particularly Iusacell and Telcel—that render services in Region 9, which covers Mexico City, and the states of Hidalgo, Mexico, and Morelos. In 2000, however, the program was extended to other regions and companies, as a result of the increased number of
complaints about the service. The expanded program was formalized in January of 2001 with the *Mobile Networks’ Quality Evaluation Agreement*, which applies to all wireless service providers, including PCS.

The current evaluation program, supported with funds provided by the mobile industry, tests twice a year the quality of service provided in the 19 cities with the highest mobile penetration in Mexico, including Mexico City and the main state capitals, such as Monterrey, Toluca, Hermosillo, and Chihuahua. It also implements surveys to evaluate consumers’ perception of the service (Cofetel, 2001b). According to Cofetel (2000), it intends to introduce quality-of-service evaluation programs for all the different types of networks, at the retail and wholesale levels. In the latter level, it has already tested the quality of interconnection among local service networks within Mexico City (p.57).

Based on the indices set by Cofetel for retail mobile services, operators are allowed a maximum of 6 percent of dropped calls, 5 percent of incomplete calls, and up to 12 seconds to provide dial-tone (Cofetel, 2001c). These benchmarks will be adjusted downward to make them comparable to those set in other countries.23 To date, Iusacell and Telcel had already paid rebates to their subscribers in Mexico City, and Pegaso and Telcel will be required to do so this year as a result of their performance in the last evaluation.24 The results of the last evaluation performed in July of 2001 showed that Iusacell had improved its performance and passed all the benchmarks set by Cofetel with 0.5 percent of dropped calls and 2.2 percent of non-completed calls. Telcel and Pegaso, with greater coverage than Iusacell in Mexico City, failed to pass the benchmark for non-completed calls (Pedrero, 2001c).
As an added incentive to improve performance, in March of 2001, Cofetel decided to ration the distribution of the new series of mobile telephone numbers, so that each service provider will be assigned only the amount of telephone numbers that its current infrastructure is capable of handling efficiently. Jorge Nicolín, then President of Cofetel, stated that Cofetel would release or restrict more telephone numbers to operators according to the results of their periodical evaluations, their installed capacity, and improvements in quality of service (García, 2001).

In the area of customer service, Cofetel and Profeco have required mobile operators to provide their subscribers information regarding the characteristics of mobile service and, particularly, its limitations in area coverage and call completion. Similar to fixed operators, mobile operators are now required to establish a phone line specifically to receive complaints and repair orders. Cofetel, for its part, is also increasing the amount of quality-of-service information it provides to consumers. The comparative results of the evaluations have been made public for the first time and published on Cofetel's web site to allow subscribers to make informed decisions regarding their mobile service providers. Not surprisingly, those companies that have been able to meet the standards, such as Unefón, are using this information to promote their services.

Based on the performance of the industry in the area of quality of service, I have four hypotheses regarding the areas in which consumers will be very critical in their letters. First, I expect consumer complaints about equipment-oriented quality of service to decrease over time as a reflection of improvements in this area; in contrast, I expect complaints regarding people-oriented problems to decrease but at a lower rate, due to
the difficulty of changing corporate culture and the employees' attitudes about service. A third hypothesis is that mobile services and new technologies will become topics of complaint as the penetration of these services increases. Finally, I expect the introduction of detailed billing to have an impact on the number of complaints regarding billing errors. The analysis of consumer letters in Chapter 6 will point out whether these hypotheses were confirmed or not.

In sum, from the time of Telmex's privatization, quality of service has improved considerably, particularly in equipment-oriented quality indicators. The advancement in people-oriented indicators has been slower, as it implied a change in practices that were part of Telmex's culture for a long time, such as corruption and lack of politeness on the part of its employees. The shift from these practices to ones focused on customer service is still in process. Compared to other countries, even after the negative impact of the crisis, Mexico has reached internationally competitive levels in some indicators of quality of service, but has remained well behind in others, such as waiting time for installation of new lines.

In mobile services, regulatory intervention to monitor performance in this area has already produced some favorable results, and a proactive attitude towards monitoring quality of service at the wholesale level may be able to avoid problems in the future that could hinder competition. The public distribution of information regarding the quality of service of mobile providers is a positive step towards providing the consumer tools to make informed decisions and encouraging providers, both new and old, to compete and differentiate their services not only based on price, but also quality. Different prices, levels of quality-of-service, and a variety of services rendered
provide consumers a greater ability to choose. In the next section, I discuss the new services that telecommunications providers are offering to consumers in Mexico, and how this has expanded choice.

D. Innovation and choice

One of the expected benefits of increased liberalization is for consumers to gain access to a greater range of choices in technology, services, and suppliers of services and technology. As discussed in the above sections, the last ten years have brought about to consumers in Mexico new ways to connect to the telephone network, such as mobile phones and PCS; new ways to pay for services, such as value-stored cards for mobile phones and shared lines for payphone services; faster and better technology, such as fiber optic and digital switches, and a greater choice of suppliers in all the industry markets after the end of Telmex's private monopoly. This section discusses the advances made in the implementation of new services and technology in Mexico, particularly Internet services. Access to the Internet is increasingly being considered by the Mexican government, as in many other countries, as something just as important as having access to the plain old telephone service.

In contrast to the performance criteria discussed above—connectivity, affordability, and quality of service—that have a more or less stable set of indicators, innovation and choice are criteria in constant evolution. The rapid changes in technology appear to compel countries to accelerate the rate in which these new technologies are adopted and diffused among their population. Mexico is no exception.
While the battle to increase penetration of basic telephony is still very far from finished, Mexico is already trying not to be left behind in the area of broadband communications and the Internet. Slowly, but increasingly gathering momentum, different sectors of the population are adopting the Internet in their daily activities. This is particularly true for businesses and residential users, as illustrated in Figure 5.14.

Figure 5.14: Estimated number of Internet users in Mexico (1994-2000)
According to Cofetel, as of December of 2000, Mexico had about 2.9 million Internet users, and 11 states, including Mexico City had more than 30 Internet Service Providers (ISP) (Gascón, 2001; Cofetel, n.d.b). The level of penetration of this new service, however, is still very low, with only five out of a hundred Mexicans having access to a computer and two out of a 100 having access to Internet services, according to a recent study made by the consulting group Accenture (Galán, 2001, ¶ 1). Compared to other Latin American countries, however, Mexico is above average in computer penetration and together with Brazil and Argentina it has two thirds of the population with Internet access in Latin America (Galán, 2001, ¶ 6).

Following a similar pattern to that of basic telephony, the level of penetration of Internet service at the state level in Mexico is unequal. Once again, Mexico City has the highest level of penetration, with 21.5 percent of the households having a computer, followed by industrialized states, such as Baja California Norte (15.1%), Nuevo León (14.5%), Querétaro (13.1%), and Jalisco (11.9). At the low-end of the spectrum is the same group of states that has the lowest level of telephone penetration, including Oaxaca (2.6%), Chiapas (2.8%), and Guerrero (3.0%) (Cofetel, n.d.c).25

The similarities in the penetration patterns of basic telephone and Internet services in Mexico are not surprising. The demand and supply of both services are affected by similar variables, such as income levels and the concentration of population within the territory. Also, as a value-added service, the provision of Internet depends on access to basic telecommunications infrastructure, be it coaxial cable or the local loop, which further limits the possibility for states with low teledensity to have rapid access to new services.
While considering that providing each Mexican with a computer would be an unreachable goal, President Fox's administration is developing a project, called "e-Mexico", to increase Internet penetration along the Mexican territory, particularly in rural areas, so that, in the words of President Fox, "each Mexican man or woman, including children, indigenous peoples, or farmers, may have access to a computer, and thus, access to connect to the network" ("Fox en Vivo", 2001, ¶ 70). The e-Mexico project includes four programs: education, health, government access, and commerce. Its goal is to connect 10 thousand communities by 2006 through the establishment of Internet kiosks in telegraph and post offices initially and, later on, in schools, hospitals, and community centers. To facilitate usage, the plan also contemplates providing training courses to the population.

The interest of the government in expanding Internet services and the potential profitability of the broadband market in Mexico are attracting private investment into the sector. Just in 2001, Telmex allocated 855 million pesos, that is, 45 percent of its total annual investment budget, to expand its data-line business (Duffy, 2001b, ¶ 1). Regarding the profitability of the sector, a Pyramid Research (2001) report estimates that the share of revenues represented by Internet services will increase from 8 percent of Mexico's communication services revenues (a pie that also includes fixed and mobile voice, pay TV, and datacomms) in 2000 to 20 percent of the revenues in 2005. Based on the estimated total revenues calculated by Pyramid for 2000 and 2005—$13.7 and $30.1 billion dollars, respectively—this would represent an increase in revenues from an estimated $1.09 billion dollars in 2001 to $6.02 billion in 2005 (Pyramid Research, 2001, Exhibit 1).
To exploit the potential of the broadband market, Telmex has already established alliances with several major American providers of broadband services and Internet content. These alliances will allow it to provide a diversity of services to different segments of the Mexican and Latin American population. For instance, with Microsoft, Telmex established T1MSN, the most used browser in Mexico and one of the most important in Latin America, offering content in Spanish; with Hewlett Packard, it created Triara, a web hosting and co-location service for businesses; with Oracle, it entered into the business-to-business service (e-procurement), and, in an alliance with Prodigy, it is offering ISP services to more than 634 thousand residential and business subscribers in Mexico (Telmex, 2001c).

At the same time, to expand its customer base for Internet services, Telmex developed a program that finances the purchase of computer equipment by end-users, which is bundled with a contract to use Telmex's ISP service, Prodigy.27 By the same token, to approach the vast number of potential users that are unable to afford a computer, as well as those who lack credit history or even basic telephone service, Telmex is planning on investing about 12 million dollars to install 20,000 public internet kiosks, called "Ladanet", in public access sites such as schools, shopping malls, and bus stations in the next five years (Telmex, 2001c, p.9). At a cost of 0.50 pesos per minute—50 percent cheaper than the per-minute charge for a payphone call—, users will be able to access the Internet using the same value-stored cards they currently use for Telmex's payphones.
Other suppliers are also entering the Internet market. Alestra, the long distance and now local service provider, has already initiated a three-phase plan to introduce broadband services to different segments of the market. In the first phase, Alestra is focusing on large corporate clients, and in the subsequent phase it will render voice, data, and Internet services to mid-size businesses and residential clients in Mexico City, Guadalajara, and Monterrey; finally, in the last phase it will expand its customer base to include a broader range of business and residential subscribers (Mares, 2001, ¶ 3). Avantel, the other long distance competitor, is also making incursions into the data market and provides access to internet services for both residential and commercial customers in 56 of the largest cities in Mexico, including services such as virtual private networks, hosting, and collocation, among others.

The choice of Internet service providers (ISPs) in Mexico goes beyond these three companies. By the end of 2000 there were more than 200 ISPs (Mandel-Campbell, 2000d, ¶4), and many other suppliers of both Internet access and content were coming into this new market. Among OECD member countries, Mexico ranks third, following Italy and Turkey, for the highest rates of growth in Internet hosts, with a 114.9 percent increase from July of 1999 to July of 2000 (OECD, 2001, p.112). Nevertheless, when the number of hosts is considered with respect to the country’s population, Mexico has the second lowest number of Internet hosts per 1,000 inhabitants among OECD countries, with a penetration of 3.8 hosts (OECD's average is 81.5 hosts per 1,000 inhabitants) (OECD, 2001, p.100, 112).
OECD uses the number of Internet hosts as an indicator of connectivity to the Internet and in combination with the number of secure servers, the number of Internet hosts represents the ability of a country to have access to and engage in electronic commerce. Based on OECD data (OECD, 2001, p.106), Mexico is ranked last for both indicators among OECD countries. In view of its current growth, it is expected, however, that the volume of electronic commerce conducted in Mexico will increase. An analysis of the sector (Galán, 2001, ¶5) made by Accenture estimates that the revenues for e-commerce will increase from 238 million dollars in 2000 to 1,877 million in 2003.

The broadband market still has a lot of space to grow, but the entry and survival of new service providers depends in part on their ability to compete with Telmex. The incumbent has a strong hold on the provision of Internet services in Mexico, due to the different strategies mentioned above. Several analyses estimate that Telmex controls 60 percent of the ISP market (Galán, 2001, ¶3; Pedrero, 2001d, ¶4) and its near monopoly control over local telephony and interconnection links to ISPs further heightens its power over the sector. The ISPs have already accused Telmex of anti-competitive behavior, including the use of delay tactics in the provision of new lines and greater routing capacity, as well as charging high rates for access to high-speed connections (Mandel-Campbell, 2000d, ¶5). The end result has been costly Internet access rates to end-users and higher constraints on connectivity.

The growth of the broadband market will require Cofetel and the Commission for Competition to intervene in order to establish a more level playing field for the sector. Among Cofetel's proposals to promote competition in the telecommunications
sector and particularly in Internet service provision are: unbundling the local loop, the
introduction of high-speed broadband technologies for wired and wireless access;
opening LMDS and MMDS frequencies to bidding; promoting the creation of network
access points (NAP) in Mexico, and the establishment of interconnection rules, cost
structures and compensation mechanisms that are more efficient and equitable (Gascón,

Other services

Innovation is not restricted to broadband services. In local telephony,
innovation has brought about value-added services such as third party calls, call
waiting, voice mail, and Caller ID, which have increased their penetration in recent
years. According to Telmex's Annual Report (2001c), by the end of 2000, at least one
of these services was available in 27.2% of the lines for both residential and business
services, which represented a 58.6% increase from 1999 (p. 6). Better technology has
also allowed Telmex to improve its billing practices by introducing detailed billing for
measured service in 1998 and giving its residential and business customers access to
their accounts through the Internet.

Telmex is also implementing innovative ways to expand its subscribership
among the poorest sectors of the population. While the projects for kiosks, shared and
prepaid lines for residential service discussed above focus on making telephony
affordable to the population in Mexico, a new project called "Mexico on line" is going
beyond the national borders. In this program, Telmex is tapping into the customer base
of Mexican immigrants living in the United States to subsidize the subscriptions to
fixed or mobile telephone lines of their families and friends in Mexico (Yunker, 2001). If successful, this strategy could be quite profitable for Telmex. By expanding subscribership in Mexico, through funds originated in the United States, this strategy would allow Telmex to increase its revenues for local and national long distance calls generated by the new lines, and particularly, for terminating an increasing number of incoming international calls from the United States.

In mobile services, Telcel, America Móvil's subsidiary, is expanding its technology and services towards the next generation of products at a very fast pace, focusing mostly on the business market. Some of the services provided include global positioning systems (GPS), virtual private networks (VPNs) and telemetry. In the residential market, as in the case of wired lines, Telcel's strategy is mostly oriented towards providing low-end subscribers with more choices for access to basic telephony. For instance, in rural areas not served by the fixed network, Telcel has established "Telephone Agencies" that provide access to local and long distance telephone service using mobile technology and the same stored-value cards used by Telmex for its public pay telephones. These technologies are now used also to provide both residential and commercial consumers with access to private wireless service for their households or businesses and in wireless payphones.29

The introduction of the third generation of mobile technology is still pending, but under discussion. The main concern is allocating frequencies, which are the most adequate for this purpose. To this end, the Communications Ministry has established a consultant group composed of Cofetel, operators, equipment suppliers and faculty members to select the frequencies and, later on, initiate the bid. According to the then
Cofetel Chair, Jorge Nicolin, one of the proposals is to use the same frequency bands currently allocated for PCS and mobile telephony for the third generation systems (Gascón, 2001, ¶ 35).

In the dimension of innovation and choice I expect Internet services to become a source of complaints in the last years of the study. With respect to choice, after having dealt with Telmex's monopoly for such a long period of time, I expect consumers to refer often to the importance of having access to a choice of suppliers in the different telecommunications markets.

In sum, the implementation of institutional reform in Mexico has brought about technological innovation and expanded choices for services and suppliers. Although most of the innovations and new services are being directed towards high-end consumers, that is, large businesses, low-end consumers (both business and residential) have also seen improvements in both indicators, particularly in the form of new choices for access to the network and to value-added services, such as the Internet. The penetration of the new services throughout the country is uneven, but the government and the private sector are definitely interested in expanding the diffusion of these innovations to the whole population.

**Conclusions**

The process of institutional reform has had a clear impact on the performance of the Mexican telecommunications industry since 1990. Changes in the regulatory framework, the introduction of competition in the different markets, as well as changes in the internal organization of the incumbent operator, Teléfonos de Mexico, have
resulted in improvements in all the dimensions of performance discussed above. In general terms, penetration has increased, prices are closer to costs, quality of service has improved, at least in equipment-oriented areas, and the choice of technologies, services, and suppliers available to consumers has increased relative to 1991. Relative to other countries in Latin America and the OECD group, however, Mexico has not performed as well, particularly in terms of penetration, one of the main objectives of the reforms.

The discussion of performance in the different dimensions also points out that consumers at the fringe of the network have at times been negatively impacted by the reforms, especially with respect to affordability and connectivity to basic and advanced telephone services. The introduction of competition and innovation in technologies and business strategies are opening new ways for low-end consumers to access the network and remain on it, but better and more proactive policies will be needed if universal access is to be achieved in the long-term future.

In this chapter I have proposed several hypotheses about consumers' opinions of the performance of the industry and how these opinions would change over time. These hypotheses are used in the following chapter to guide the presentation of results for the codification of performance topics covered in consumers' letters. The comparison of hypotheses to results will serve as an indicator of the sensitivity of consumers to changes in performance and will also point out areas of performance that are of importance to consumers.
The historical analysis was conducted using primary and secondary documents, such as Telmex's Annual Reports to Stockholders, reports from international organizations, such as the OECD and ITU, and newspaper clips. Telmex reports its performance to several entities, including Cofetel in Mexico and the Securities and Exchange Commission of the United States, because of its being a public company listed in the New York Stock Exchange. However, the data published in these reports are not always consistent and, at times, data for certain years or certain performance criteria, such as quality of service, is unavailable. Whenever possible, I tried to complement missing information using different sources. Also, to provide some consistency to the data reported, I used Telmex's Annual Reports as a base source. For more information on the reliability of telecommunications data in Mexico, see Pérez-Chavolla & Samarajiva (1997b).

"Rural lines" is traditionally used as an indicator of network extension separate from wired and wireless lines. It monitors the level of penetration of service in geographical areas that are usually considered to be high-cost and/or low-income areas due to the level of income of the majority of their inhabitants or to the complications faced by operators in serving communities with dispersed population or which are located in difficult terrains.

The Cumulative Average Growth Rate (CAGR) or geometric growth rate, estimates the average rate that is representative of the available observations over the period. It does not necessarily match the actual growth rate between any two periods. This estimate can be used between any two points time, for example, from 1990 to 1991 or 1990 to 2000. The formula to calculate CAGR takes into account the number of periods there are between Year 1, the initial year, and Year "n", the final year of the period. In this dissertation the CAGRs were calculated on the raw data that was included in the different tables, i.e. telephone lines, annual penetration rates, etc.

This service began being provided at the national level in 1989, making it impossible to compare the pre- and post-reform performance.

In 1993, for instance, only four out of every ten payphones installed in Mexico City and its suburbs were in working order. Vandalism was the cause of disrepair in 50.6 percent of the cases of out-of-service payphones (Lince, 1993).
OECD's calculations of fixed network access channels (access channels) include traditional access lines and ISDN lines. Depending on the type of connection, basic or primary, an ISDN connection can replace from two to thirty traditional access lines. (OECD, 2001, p.72).

OECD defines "telecommunication access paths" as the total of fixed access lines and cellular mobile subscribers (OECD, 2001, p. 81).

According to INEGI (2000), the GDP per capita of these states ranked 23rd (Hidalgo), 27th (Tabasco), 28th (Zacatecas), 29th (Tlaxcala), 31st (Oaxaca), and 32nd (Chiapas) out of 32 places at the national level, based on their respective GDP for the years 1993-1999. Campeche, in contrast, is ranked 3rd.

The monthly minimum wage for the states with fixed teledensity in the 3-6.99 bracket was 1,962 pesos or about US $200, as of February of 2000 (Comisión Nacional de los Salarios Mínimos, 2000).

The differentiated interconnection rate distinguishes between fixed local operators based on their service commitments. Specifically, Cofetel distinguishes providers that are committed only to render services to business subscribers in at least one of the three major metropolitan areas (Mexico City, Guadalajara, and Monterrey), using fiber optic and microwave links, from other fixed local operators. The latter group of providers is considered to have substantial network extension commitments, because they committed to render services to a large number of locations and to a large number of users within each of these locations (Cofetel, 2000, p. 51). For the purpose of this dissertation, providers focused on business customers are considered providers with limited commitments.

Under this system, the interconnection fees are symmetrical between two providers that have made substantial commitments, with each operator paying a termination fee equal to the long distance interconnection rate (0.261 pesos per minute). In addition, operators with substantial commitments to expand their networks are authorized to negotiate compensatory regimes, such as bill and keep. On the other hand, the fee payments are asymmetrical whenever one of the operators has a limited commitment, defined as a commitment to provide service to businesses in at least one of the three major metropolises (Mexico City, Guadalajara, or Monterrey).
12 Cofetel's report (2000) does not clarify if the reduced local interconnection fee applicable to providers with substantial expansion commitments was also reduced as a result of the reductions in long distance interconnection fees. Even then, it is possible that the difference between both rates is not as large as when the long distance fees were kept at artificially high levels. The rules for local interconnection do not include any information on this issue.

13 By the end of 1999, for example, Axel and Maxcom had installed only 50,000 out of the 2.5 million lines they projected to have by 2004 (Mandel-Campbell, 2000, May 16).

14 For detailed information regarding Telmex's price cap regime, see Appendix A.

15 With the economic recession affecting Mexico's finances, mobile subscribers began migrating from post-paid plans to prepaid plans in early 2002. Telcel, for instance, lost 19 percent of post-paid subscribers in the first quarter of 2002, compared to the same quarter in 2001, while the number of prepaid subscribers increased 56 percent (García, 2002).

16 The high number of disconnections has continued even into 2001. According to the company's *Annual Report*, in 2001 Telmex disconnected 615 thousand fixed lines (Telmex, 2002, p. 4).

17 Telmex Precisa, for instance, requires subscribers to be current on their monthly rent payments as a condition for rendering the prepaid card service (Telmex, 1999, ¶4).

18 The minimum wage for Mexico City is the highest of the three levels of wages applicable in the country.

19 Cofetel's resolution (Cofetel, 1998) also establishes a minimum required debt of 150 pesos to register the subscriber in the database after 30 days, and requires a waiting time of 60 calendar days before being able to register users with debts lower than 150 pesos. Once a subscriber is in the database, its current long distance provider may disconnect him after 20 working days of sending him a notification. A provider may not enter a subscriber into the database if the latter has submitted a complaint against the long distance provider before Cofetel or Profeco, or if the subscriber's long distance
service debt was the result of an unauthorized change of service provider (slamming). The Resolution also penalizes providers that do not reconnect users after they have paid their debt or reached an agreement with the company.

20. Telmex's Concession Title mandated the company to establish an efficient system for receiving complaints and requests for repair from customers. It also mandated Telmex to ensure that, by January of 1992, the systems employed for billing and for the measurement of quality standards were reliable and accurate. SCT required Telmex to implement any mechanism necessary to repair lines with failure within 8 hours after receiving the report, before January 1994.

21. It is important to point out that the system of penalties was not complemented by one of rewards that would provide the company financial or regulatory incentives to exceed performance in quality of service. Nevertheless, a better than expected performance improves the company's relationship with the regulator. It also provides Telmex public relations opportunities to improve its image before the consumers.

22. In the United States, in contrast, consumers are allowed to hold payment of the disputed portion of a bill or in some cases to put the disputed portion of the payment in escrow, until the dispute is resolved.

23. Although the evaluation program is set to end in November of 2001, Cofetel is planning to implement a permanent program to improve the quality of mobile services (Cofetel, 2001b).

24. In April and May of 2000, Telcel and Iusacell compensated their subscribers under traditional contracts with free additional airtime, equivalent to 20 percent of the minutes included in their plans. Prepaid card users, on the other hand, received five additional minutes of free airtime, equivalent to 20 percent of their average monthly consumption for prepaid users (Cofetel, 2000a, p. 57).


26. The revenues for Internet services include those generated from network access of mobile and fixed systems, Internet access, Internet backbone and transport, hosting and applications (Pyramid Research, 2001, Exhibit 1).
Although the economic recession is reducing the number of consumers purchasing computer systems from Telmex, by May 2002 the installation of up to 1,200 computers per month (López, 2002, ¶ 11).

OECD defines Internet host as a "domain name that has an IP address 'record' associated with it. This would include any computer system connected to the Internet (via full- or part-time, direct or dial-up connections) . . . . Host can be thought of as an indicator of the minimum size of the Internet" (OECD, 2001, p. 100).

In fact, by 2000, the number of wireless pay telephones operated by Telmex through Telcel had already surpassed that of wired payphones by more than 250 thousand units (Telmex, 2001c, p. 8).
CHAPTER 6

ANALYSIS OF CODIFICATION RESULTS

Introduction

The objective of this dissertation is to reconstruct the consumers' argument about the public interest in telecommunications after institutional reform. To that end, it is necessary to first identify the different claims that constitute their argument, as well as the way in which such claims relate to one another to constitute the consumers' primary claim with respect to the public interest in the telecom sector. This is the purpose of the present chapter.

The first level in the consumers' argumentative structure begins with their evaluation of the performance of the industry after institutional reform. The section on performance results in this chapter analyzes the consumers' claims about performance and how well their perceptions and expectations of performance relate to the actual performance of the industry described in Chapter 5. The set of hypotheses developed in Chapter 5 are used as guidelines for this comparison.

Based on the evaluation of performance, the focus turns to the identification of recurrent themes. The section on themes results is particularly important to the reconstruction of the consumers' argument because the different themes that emerged in the consumer letters encompassed the primary claims put forward by consumers about
the different actors involved in the telecommunications sector and the relationship that exists between them. Finally, the last piece of the argumentative structure is provided in the value claims that consumers used to support the standpoints described in the themes section. The identified values function as backing and warrants to the single arguments put forward by consumers. The three pieces of the argumentative structure, performance, themes, and values are finally put together in Chapter 7 to reconstruct what I propose is the consumers' argument about the public interest in Mexican telecommunications.

Before presenting the results from the codification process for performance, themes and values, I provide a short review of how the codification process was conducted and some basic information about the letters, the consumers who wrote them and the types of services the letters referred to. This information creates a profile of the type of subscriber that complained to the newspaper and provides a useful background to understand the consumers' claims about telecom performance in Mexico.

**Review of the codification process**

The analysis of the consumer's view of the public interest in the Mexican process of telecom institutional reform was conducted through the codification of 2,821 units identified in the 277 consumer letters selected for this study. Each unit was coded three times in order to identify different argumentative and informative elements included in them. The first round of codification searched for references to the performance of the Mexican telecommunications industry with respect to the criteria
covered in Chapter 5, that is, affordability, connectivity, quality of service, and choice. Those units that did not fit into any of these criteria were coded under "other".

The second round of codification intended to capture a more abstract level of information contained in the units, linking them with general themes that were identified through the pilot study and the first codification. These themes reflect general concerns expressed by the consumers about the performance of the industry, as well as interpretations of the relationship and actions of the different actors involved in the provision of telecommunications services, from the incumbent and its competitors, to the regulator, to the Ministry of Communications and the consumer protection agency, Profeco. A total of twelve themes were identified.

Finally, the third round of codification intended to capture the most abstract level of information by focusing on the identification of the values expressed by consumers when stating their opinions about telecom reform and the industry's performance. The units were coded into four different types of values: character, action, interaction, and society. In total, each unit of analysis was coded three times, once for performance, once for themes, and once for values.

The letters were also categorized based on general information, such as date, type of letter (complaint or thank you letter), whether the letter referred to Telmex or its competitors, as well as gender and origin of the sender. Information regarding the type of line (residential or business), as well as the services referred to in each letter was also collected. This information allowed me to establish a general profile of the flow of letters and of the consumer sending letters to the newspaper column on which this analysis is based.
Profile of consumer letters

To better understand the consumer perspective on the performance of the industry, it was necessary to provide first a description of the general characteristics of the letters included in this study and their writers. For this purpose, the letters were coded according to their purpose (complaint or thank you letter), the company they complained about, the place of origin of the complainer, as well as the type of line and service that the letter referred to. The letters were also coded by month and year to determine if their frequency varied in parallel to improvements and declines in Telmex's performance.

Figure 6.1 illustrates the distribution of letters of complaint and thank you sent about Telmex and its competitors from 1991 to March of 2001. Inasmuch as Telmex had a monopoly over most telecommunications services in Mexico during six of the ten years of the study, it is not surprising that 92.4 percent of the letters were complaints about its services and those provided by its subsidiary Telcel. The percentage of thank you letters was a minimal two percent and all of them were directed to Telmex. Meanwhile, complaints about services provided by the new competitors remained low, at 5.6 percent, due in part to their recent incursion in the market. Nevertheless, on a yearly basis, the percentage of complaints against competitors as a factor of the total number of complaints has been increasing, rising from 7.4 percent in 1997 to 23 percent in 2000.¹ This increase is explained in part by the decrease in the total number of letters published since 1997. The introduction of competition coincided with the decline in the number of complaints against Telmex. It is difficult to determine, however, if this decline stems from improvements on Telmex's performance or from other factors.²
According to the distribution of complaints against Telmex, illustrated in Figure 6.1, the majority of letters (74.7%) was sent during the years when Telmex was a private monopoly. Of the total number of complaints against the company, fifty-five percent were published during the first four years, when Telmex was focusing on achieving the expansion and quality of service goals established in its Concession Title. Ironically, most of the letters sent during the 1991 – 1994 period were complaints about connectivity and the quality of service provided by Telmex, as is discussed in the performance section below. While the number of complaints against Telmex was still
high during the crisis years of 1995 and 1996, there was a considerable decrease relative to 1994, even when during these two years the quality of service provided by Telmex actually decreased (see Table 5.7).

It is interesting that 1994 was the year when the highest number of complaints against Telmex was published. This year was particularly important for Telmex, as it represented the deadline for most of its extension and quality of service goals. Having succeeded in meeting most of them, the company and the government expressed satisfaction with the level of performance achieved. Not so the consumers, or at least not those customers who sent letters to the newspaper. Twenty-five percent of the sampled complaints against Telmex published from 1991 to 2001 were received in 1994.

Although it is possible that Telmex's advertising about its achievements might have encouraged more dissatisfied consumers to express their opinions during this year, it is doubtful that it would have had such a strong influence as to cause an 83 percent jump in the number of complaints from 1993 to 1994. Consumers' sensitivity to deterioration in quality of service might also provide an explanation, but then the peak in complaints should have occurred in 1995, when Telmex's performance on this criterion worsened, and not in 1994. The economic crisis that began in January of 1994 may have also contributed in intensifying the level of consumer dissatisfaction this year.

A complete explanation of the peak in complaints in 1994 is beyond the goals of this dissertation. Its relevance, however, stems from the fact that it underscores the contrasting perspectives that consumers, Telmex, and the government have about the performance of the industry. For this reason, it calls attention to the inability of
traditional performance criteria to capture the consumers' perspective, as well as to the need to understand the type of criteria used by consumers to evaluate performance.

**Distribution of letters by month, sender, origin, type of line and service**

The distribution of letters by month, illustrated in Figure 6.2, shows that complaints tended to peak quarterly during the months of March, June, and September, with the exception of December. The letters sent during these months were mostly quality of service complaints referring to lines out of service, repair calls that were consistently unattended, and problems with billing and collection. The fact that the largest peaks occurred in June and September may be related to increases in the number of faulty lines due to rain, since in Mexico the rainy season runs from late May through September. The high number of complaints published in March, however, cannot be clearly explained by weather or any other seasonal factor, to my knowledge.

The distribution of letters according to the type of sender, illustrated in Figure 6.3 below, failed to support the findings of the marketing and retailing literature described in Chapter 3. As mentioned above, research on the demographic characteristics of the people that complain about service found that women tended to complain more often than men. This trend was not reflected in the letters published in *El Financiero*, where the majority of the letters were sent by men and only 34 percent by women. Nevertheless, this distribution coincides with the general profile of the newspaper's readers shown in Table 3.1. Organizations, defined for the purpose of this dissertation as a set of consumers that are somehow organized as a group, such as civil
Figure 6.2: Distribution of consumer letters by month (October 1991-March 2001)
associations and neighborhood groups, represented only a small portion of the senders. This fact illustrates the low level of consumer activism that exists in Mexico to date.

With respect to origin of the senders, only 39 percent of the letters contained sufficient information to allow the origin to be identified. 24 percent of the senders resided in Mexico City, 12 percent in the State of Mexico, which surrounds Mexico City, and only 3 percent resided in other states, as shown in Figure 6.4. Although only eight letters were identified as coming from other states, they were sent from eight different states covering the central, south and west regions of Mexico. 3 61 percent of the letters did not provide sufficient information to allow identification of the origin of the sender.

Figure 6.3: Distribution of consumer letters according to the type of sender.
Figure 6.4: Distribution of consumer letters based on origin, type of line, and services mentioned.
The prevalence of letters sent by consumers from Mexico City and the State of Mexico is not a surprising result for two reasons. First, almost 35 percent of the lines installed in the country are located in Mexico City and the State of Mexico; secondly, 54 percent of the newspaper's copies are sold in Mexico City and its suburbs. Nevertheless, since *El Financiero* is a nationally distributed newspaper, it was expected that the sample of letters would include a higher percentage of complaints coming from states other than the State of Mexico. Although it is possible that some of the unidentified letters might have come from other states, the small number of letters from other states prevented making useful comparisons between the needs and values expressed by consumers in Mexico City and those of the rest of the country.

The distribution of letters according to type of line, also illustrated in Figure 6.4, shows that the majority of customers complained about service to residential lines (69 percent). Business customers followed in a distant second place with 17 percent of the letters, while wireless services and payphone lines were referred to in only 7 percent of the letters. The area of the pie referred to as "not applicable" includes references to other services, such as directories and problems with digging.

When the distribution of letters is observed over time (see Figure 6.5), it is evident that problems with residential lines were particularly prominent during the first years of the private monopoly, especially in 1994. In this year, complaints about residential lines reached an all-time high of 48 letters, which represents almost 25 percent of all the complaints recorded for this type of line. By the same token, eighty percent of the complaints referring to problems with business lines were also recorded during the years of 1992 to 1994.
It is possible that the high number of complaints for business and residential lines recorded from 1992 to 1995 was the result of Telmex's internal policy of giving priority to the installation of new lines and to digitalization over attending trouble reports. This policy was never stated officially, but was expressed off the record by Telmex's employees to consumers. For instance, one consumer wrote: "a [technician] from Teléfonos de México told me that they are not making repairs, but only laying new
lines; I would have to wait for two months or longer for [my telephone] to be repaired" ("No tenemos", 1991, ¶ 3). Similarly, in 1992 an employee in one of Telmex's business offices informed another customer that "the company's policy [was] to only do new installations and to keep orders for repair and change of address on hold" ("Telmex: ¿Un atentado", 1992, ¶ 2).

Relative to complaints about the other types of lines, complaints about residential lines were the highest throughout the 1991-2001 period, with the exception of 2000. Even so, Figure 6.5 shows a noticeable decrease in the number of complaints since 1999, perhaps indicating an improvement in residential service. The improvement is also noticeable in business lines, for which the sample recorded no complaints after 1999.

With respect to the distribution of letters based on the type of service, Figure 6.4 above shows that local telephony was by far the most problematic, with 78 percent of the letters referring to problems with local service in general or measured service in particular. Measured service became a special concern of consumers in 1997 and 1998, when Telmex resumed its process of rate rebalancing (see Figure 6.6). Meanwhile, problems with long distance service represented only 9 percent of the letters, and referred for the most part to billing inaccuracies and problems with slamming. The increase in the number of letters about long distance services from 1996 to 1999, illustrated in Figure 6.6, corresponded to the initiation of the process of pre-selection of long distance providers in 1996 and reached its peak in 1997, when slamming complaints began being published in the newspaper column.
The percentage of letters about wireless services was surprisingly low, at 6%, particularly when considering the exponential increase in the number of mobile subscribers that occurred since 1999 and the problems with quality of service caused by the rapid growth of this service. The impact of mobile telephone growth on the number of complaints about wireless services is more evident when looking at the longitudinal distribution of letters illustrated in Figure 6.6. Based on this figure, the number of complaints doubled from 1998 to 1999, which coincides with the introduction of the
modality of Calling Party Pays (CPP) in Mexico. As discussed in Chapter 5, CPP was one of the factors that contributed to the recent explosion in mobile subscribership in Mexico.

It is also interesting that new services, particularly those linked to the provision of Internet services, were mentioned almost as often as wireless services, even when the number of Internet subscribers is much lower than that of mobile telephones. In 1999 and 2000, all the letters included under new services in Figure 6.6 referred to Telmex's Internet service. During those two years, the number of letters referring to Internet services was higher than or almost as high as that for wireless services. It is possible that this finding may be influenced by the type of consumers that sent letters to the newspaper column.

According to the demographic characteristics of typical "activists", described in Chapter 3, consumers that write complaints tend to have higher than average income. Following this reasoning, the consumers that complained about Internet service were probably able to afford the purchase of a computer and access to Internet services, a fact that, in the case of Mexico, indicates that their income must be above that of the majority of the population which earns less than 400 dollars per month. According to a recent survey conducted in the suburbs of Mexico City, many families considered that mobile telephony and internet services are expenditures necessary to satisfy work-related and communication needs (Ríos, 2002). Based on this trend, it can be expected that as the number of subscribers to both types of services increases, so will the number of letters complaining about them.
So far, the analysis of the general characteristics of consumer letters has provided interesting findings about the type of consumers that complained to the newspaper column selected for this analysis and about the types of services that subscribers in Mexico complained about. The data pointed out differences in the frequency and content of the letters published during Telmex's private monopoly and after the introduction of competition and new services. In general, residential and business consumers were particularly dissatisfied with the quality of service provided by Telmex during the private monopoly period, especially in local service. The new competitors are increasingly gaining the attention of consumer complaints, but the number of letters published about them was small relative to that accumulated by Telmex since its privatization.

The demographic information collected about the complaining consumers was scant, as it was difficult to deduce from the content of the letters any clear information regarding the consumer’s level of education and income, and in some cases, even the place of origin of the letters. However, one characteristic of the letters that did include information about their origin was that most of them originated in Mexico City and its suburbs, as well as in the State of Mexico. This means that the codifications results to be discussed in the following sections are, for the most part, representative of the point of view of urban subscribers. To ensure that the point of view of the few rural subscribers in the sample was not lost in the analysis, I emphasize any divergence between rural and urban subscribers that transpired in their complaints. Armed with the knowledge of the profile of consumers that complained about the performance of the sector, the following sections focus on the analysis of codification results.
Performance

As stated above, the analysis of the consumers' opinions about the performance of the telecom industry in Mexico after institutional reform constitutes a first step in the reconstruction of the consumer's public interest argument for the telecom sector. The claims that emerged from the evaluation of performance are used by consumers in their argumentation as premises for the more abstract claims that appeared in the coding of themes. As such, the consumers' claims about performance are the cornerstone of their argumentative structure. To guide the analysis, the most important results of the codification are compared to the hypotheses developed from the data included in Chapter 5.

To identify the areas of performance that consumers complained about, the 2,821 units found in consumers' letters were coded and distributed into one of five categories: Affordability, connectivity, quality of service, innovation and choice, and other. The purpose of coding the letters for performance was to find out which areas of performance were considered problematic by consumers and how their evaluation of performance has changed over time. The results are presented in terms of two different units: units of analysis and number of letters. "Units of analysis" was the actual unit employed in the codification process, yet I considered it useful to present results for performance also in terms of the number of letters referring to a particular dimension of performance.

However, once the codification process was finished, it was evident that using units of analysis as the exclusive means to present results for performance would overstate the importance of certain dimensions. This was due to the fact that a
consumer would sometimes complain about the same performance problem for more than one unit of analysis in the same letter, while in terms of letters a complaint about a particular problem with performance was counted only once, notwithstanding the number of sentences or units of analysis the consumer used to express his or her opinion about this problem. In this sense, presenting results in terms of letters provides a more accurate depiction of the areas that consumers complained about than units of analysis does.

The distribution of letters and of units of analysis coded under each of the different dimensions of performance from 1991 to March of 2001 is shown in Figures 6.7 and 6.8 respectively. Based on this information I respond to the set of hypotheses stated in Chapter 5 for each of the dimensions of performance. Major trends, unexpected results, and changes which occurred during the period of analysis are also discussed.

In general, Figures 6.7 and 6.8 show that quality of service was the dimension of performance that consumers in Mexico complained about most after the privatization of Telmex. Originally, I expected that the letters and units of analysis would be more evenly distributed between the criteria of affordability, connectivity, and quality of service because problems in these three areas justified the need to engage in institutional reform. Yet, as Figures 6.7 and 6.8 illustrate, consumers referred to problems with quality of service in 54 percent of their letters (266), while connectivity was only mentioned in 23 percent of them (116 letters), and affordability ranked fourth, behind choice, with 11 percent (55) of the letters.
Figure 6.7: Distribution of consumer letters by performance criterion (1991-2001)
Figure 6.8: Distribution of units of analysis by performance criterion (1991-2001)
As stated above, when expressed in terms of units of analysis (shown in Figure 6.8), the preponderance of the quality of service criterion over the other criteria is even more salient. Of the total 2,821 units coded for performance, 1,734 (74%) referred to issues of quality of service. Connectivity, affordability and choice represented the remaining 26 percent. The difference between the observed and expected distribution of units of analysis among categories of performance was statistically significant using a $X^2$ goodness of fit test $[(3, N = 2328) = 1193.1, p < .01]$.

The distribution of letters over time illustrated in the bar graph in Figure 6.7 shows two peaks in the complaints about performance. The first peak began in 1993 and reached it apex in 1994, the years when Telmex was reaching the targets set in its Concession Title. This first peak is linked to increases in complaints about connectivity and quality of service. The highest number of letters about connectivity for the 1991-2001 period was published in 1993 and about quality of service in 1994, just at the beginning of the crisis period. In contrast, an increase in complaints about affordability and choice explain the second peak that occurred in 1997 and 1998. As stated in Chapter 5, it was expected that the number of complaints would increase during the crisis years in response to Telmex's decreased performance in the areas of connectivity and quality of service. Ironically, during 1995 and 1996 the number of letters published about these two dimensions of performance actually decreased by almost half with respect to the 1994 peak. On the other hand, affordability and choice began gaining force during the crisis years and kept increasing until 1998, encouraged by the proximity of the end of the private monopoly period and the entry of new competitors.
The distribution of letters during the 1991-2001 period also shows that even though problems with quality of service were the most important source of complaints throughout the ten years, its preponderance over the other three performance criteria was concentrated in the first years of the private monopoly and tapered off as the network was modernized and many of the recurring problems of network reliability were solved. Connectivity was also an important criterion during the first years of the private monopoly and while it remained the second most important criterion during the whole period, the number of complaints in this area of performance also decreased over time. The years of economic crisis mark a shift in consumer complaints that brought to the forefront issues of affordability and choice.

In the following sections I address the hypotheses expressed in Chapter 5 for each criterion and present a more in-depth description of how consumers' opinions about performance on each criterion varied over time. I also indicate the primary claims that consumers expressed about performance in their letters.

**Connectivity**

*Hypothesis:* Connectivity to the network, including the speed at which the demand for connectivity is satisfied, will be a criterion frequently mentioned in the letters of consumers in Mexico.

This hypothesis was only partially fulfilled. As stated above, it was surprising that consumer complaints about connectivity ranked second and were well below those for quality of service, particularly because in Mexico teledensity had only reached a low 12.5 lines per 100 inhabitants by 2000–up from 6.4 at the time of the privatization of
Telmex—and the distribution of these lines throughout the nation is not even. Complaints about connectivity expanded throughout the ten years of analysis; they peaked in terms of number of letters published in 1993 with 22 letters and then decreased to only two letters in 2001, as illustrated in Figure 6.7 above.

In their letters, consumers in Mexico referred to five different aspects of connectivity: access to the network, the speed of installation, disconnection from the network, problems regarding service contracts, and waitlist for lines. Of these topics, access received the most attention, with 54 letters referring to it, that is, 30 percent of the total number of letters about connectivity. Surprisingly, in their letters consumers referred to problems with service contracts more often than they did to issues of speed, waitlist, and disconnection. Contracts were referred to in 22 percent of the letters in which connectivity was an issue, closely followed by disconnection (21%) and speed of access (20%). It was also surprising that, in a country where consumers had to wait for years to get a new line, only 14 letters (7%) referring to connectivity mentioned the waitlist during the ten year period. The distribution of letters about connectivity from 1991 to 2001 is shown in Figure 6.9.

**Hypothesis:** Consumers' complaints about connectivity will increase during the crisis years relative to the first years of the private monopoly as a result of the high number of disconnections. In general, however, complaints about connectivity will decrease as density increases.

The first part of the hypothesis was not supported by the codification results for connectivity. Figure 6.9, illustrates that, with the exception of problems of
disconnection, consumers' concerns about connectivity clustered during the private monopoly period, peaked in the 1993-1994 years and then, as expected, began a gradual decrease during the competition era. Two exceptions to this observation are the categories of disconnection, which peaked in 1996 and remained strong until 1998, and contract, which has fluctuated up and down throughout the period of analysis.

This distribution pattern coincides with changes in the performance of Telmex, particularly with respect to disconnection. As is discussed in Chapter 5, Telmex did
increase the number of fixed lines and of populations served during the private monopoly, but the growth rate was lower than initially expected, due in part to the negative impact of the crisis period. In 1996 and 1997 Telmex disconnected almost as many lines as it added, and the number of disconnections is still quite high up to this day. The increase in consumer complaints about disconnection during these years seems to be a reaction to this policy.

The increase in letters about contract during the competition period can be explained as a reaction of consumers to the availability of new services and providers because most of these complaints referred to service contracts for long distance service, Internet, and mobile services. I consider that the increase in the number of complaints about access, speed, and waitlist during the first years of the private monopoly might have been prompted not only by Telmex's slow pace of improvement in these areas, but also by the high level of expectations regarding increase in penetration which was generated by the government discourse at the time of Telmex's privatization. The speed of installation of lines in areas with available lines and the waiting time for new lines in underserved areas was reduced over time, but it was not until 1998 that Telmex was able to provide service in a month, down from a wait of almost two years in 1990. In this sense, it is very telling that the complaints about waitlist stopped in 1998.

Complaints about access have also decreased during the competition period, most probably as a result of the increased accessibility and affordability of mobile services beginning in 1997. The main trends in each of the five categories of connectivity are discussed below.
Access

Under the category of access I coded any reference to the importance that having a telephone had for both residential and business users. It also included references to the problems caused by the lack of access or connectivity, either because of disconnection, out of service lines, or lack of available lines in a region.

Access was one of the few categories in which complaints from business subscribers surpassed those made by residential ones. This might be because of the economic impact that losing connectivity had on their daily activities. Most of their complaints tended to refer to the time they had been disconnected, or their inability to conduct business and serve their clients. For residential customers, on the other hand, having access was valuable because it allowed them to keep contact with family members, particularly children, the elderly and sick relatives. Having access was also important in times of emergencies, as stated in the following quote:

"Sin embargo, precisamente por ser pocas las casas en la zona donde habitamos hemos sufrido de innumerables robos y situaciones de emergencia sin poder solicitar auxilio oportunamente" (esp950820)

[However, precisely because of having only a few houses in the area where we live, we have suffered from countless robberies and emergency situations without being able to request help on time]

In general, consumers argued that the level of connectivity provided by Telmex while it was a monopoly was still insufficient. Therefore, they looked for ways to obtain access for themselves and their communities, even when that implied having to bribe Telmex's employees. One consumer stated in this respect:
"Mas aún, me han quitado la oportunidad de recurrir a la "mordida", al "soborno" con tal de poder contar con teléfono. " (esp931012)
[Even more, they have taken from me the opportunity to use the "bite", [that is] to "bribe" in order to be able to have a telephone.]

I had two hypotheses regarding access. The first one was that payphones would be an important form of access for consumers. The second was that rural consumers would complain more about access than urban subscribers, just because of the difference in telephone line penetration in both areas. As stated above, the composition of the sample of letters did not allow supporting either of these hypotheses because of the small number of letters that I was able to identify as being sent from rural areas and the small percentage of letters that actually referred to payphone service (1% of the sample). Notwithstanding these limitations, I consider that the content of the few letters that referred to payphone service and to the access that rural communities and poor urban neighborhoods have to the network, provide some interesting clues about the importance of access for these communities.

In their letters, low-income and rural users expressed their frustration at not having access to telephone service, particularly when Telmex based its advertising campaign on its efforts of extending the network throughout the country. One letter stated in this regard:

"Cómo es posible que Telmex anuncie "llevamos el servicio telefónico a todos los rincones del país", cuando nosotros no vivimos precisamente en un rincón y, sin embargo, después de haber hecho solicitudes para líneas telefónicas desde hace cuatro años, en que se construyó este fraccionamiento (por cierto "residencial"), aún no gozamos del privilegio de contar con dicho servicio en casa." (spl940105)
[How is it possible that Telmex advertises "we bring telephone service to all the corners of the country", when we don't in fact live in a corner and, yet after having applied for phone lines for four years, since this apartment complex was built (by the way "residential"), we still don't enjoy the privilege of having this service at home.]
Consumers also challenged Telmex's explanations for not providing them with service by providing evidence to the contrary and suggesting alternative solutions for access. Telecommunications service providers usually state that they need government incentives to adequately serve high cost areas and low-income subscribers because they do not generate sufficient revenue from serving them to obtain a profit. Yet experiences in countries like India have provided evidence that giving access through payphones can be profitable and can help a community increase their level of income based on the use of the telephone they give (Pitroda, personal communication, March 2002). The following letter from a rural town in the State of Mexico seems to support Dr. Pitroda's point about the profitability of payphones:

“El uso es alto, puesto que es la única línea de la zona, además, gran parte de la población trabaja y habla desde Estados Unidos, los ingresos que se aportarían serían cuantiosos por este servicio, al no ser que su empresa no los necesite.” (spe971030)
[The usage is high, since it is the only line of the area, besides, most of the population works and calls from the United States; the revenues that would be generated would be considerable for this service, unless your company doesn't need them.]

Having access to telephone service is claimed as a priority of low-income and rural consumers and they seem willing to pay for it, even when the burden of the cost might be higher than for other subscribers, as the following quote from inhabitants in a low-income suburb in the State of Mexico indicated:

“En vista de que para Telmex no es costeable cablear esta zona por estar poco poblada, nosotros nos hemos ofrecido a pagar el cableado especial y todo lo que sea necesario, pues consideramos que nuestra seguridad no tiene precio. Sin embargo, ni aún así nos hemos visto favorecidos” (esp950820)
[In view of the fact that for Telmex it is not affordable to wire this area because of having so little population, we have offered to pay for the special wiring and for all that is necessary, because we consider that our security is priceless. However, not even then have we been favored [with the service]]
In sum, consumer letters about access clearly point out the importance of being connected to the network for different types of consumers, ranging from business users to residential, to low-income and rural. Being disconnected because of Telmex's slowness in repairing, installing, and rolling new lines negatively affected the ability of consumers to conduct their daily lives and they expressed their frustration about it. With respect to their arguments in this area, consumers claimed that the level of connectivity provided by Telmex was insufficient and that access is a priority, particularly for low-income and rural consumers.

**Speed**

There was no specific hypothesis developed for this category of connectivity. Yet speed was a recurrent topic of complaint in consumers' letters. The category of speed of connection included references to the time consumers have to wait to get their lines installed after they have paid for them. In this sense, speed provides an indicator of Telmex's and the new competitor's performance on held orders, that is, requests for services delayed beyond the commitment date due to lack of facilities. This category also included references in which consumers complained about the time it took to get reconnected to the network after being disconnected for late payment.

As is discussed below, the topic of time was so recurrent in consumers' letters that it actually became one of the categories developed during the codification for themes. Most of the letters that referred to speed of installation criticized Telmex for its inability to fulfill its installation commitments on time. During the monopoly period
most of the letters referred to installation and reconnection of business and residential fixed lines, but in the latter years, the majority of complaints about speed focused on the delivery of computers to have access to Internet services.

The contrast between the timeframe to which Telmex committed and the time that subscribers actually had to wait for the line to be installed was quite large in some cases, ranging from a few weeks to months and even years. Once again, it is important to point out that speed refers to installation of existing lines and not to the waitlist for network roll up, which is discussed below. Another trend that appeared in consumers' letters was that Telmex would at times install the phone, but the line would not provide service at the time of installation, so a subscriber would have to wait longer to get connected. Examples of these trends are shown in the following quotes:

"El técnico encargado de la instalación del aparato me indicó que a mas tardar en dos días me llegaría la línea; sin embargo, tengo ya cinco meses esperando" (esp930817)  
[The technician in charge of the installation of the apparatus indicated to me that in no more than two days I would have a line; however, I have been waiting for five months already]

"El 19 de noviembre de 1993, después de muchos años en espera de líneas, instalaron mi teléfono, pero sin línea telefónica." (spl940118)  
[On November 19 of 1993, after many years of waiting for lines, they installed my telephone, but without a phone line.]

"Quiero saber cuánto tiempo más hemos de aguardar o si -en su defecto- debo heredar la solicitud a mi hijo para que él siga insistiendo." (esp960529)  
[I would like to know much longer we must wait or if...I should will the [telephone] application to my son so that he can continue insisting]

In terms of speed, the consumers' primary claim was that Telmex failed to fulfill its installation commitments on time.
Disconnection

Consumers complained about disconnections from the time of Telmex's privatization. Yet, during the economic crisis, the number of subscribers that failed to pay their bills and were disconnected from the network increased substantially. The wave of disconnections that began in 1996 had a strong impact on consumers, as is reflected in the increased number of letters from 1996 to 1998. Perhaps the most important trend that was detected in the consumers' letters was their difficulty in understanding the rules for service disconnection. Based on their comments, it seems that consumers did not know that by being late in their payments they could risk losing their line. Many consumers seemed shocked when they realized that even after paying their debt to the company they did not regain connection because their line had been given to another customer already. The following quotes regarding this trend point out the need to improve the information provided to subscribers about the processes of billing and disconnection, so that they are better informed about what they need to do to avoid losing their lines:

"Lo que yo pedía, suplicaba, era que me impusieran una multa o que me señalaran alguna tarifa que me fuera aplicable para conservar mi línea, nada." (esp960919) [What I was requesting, begging for, was for them to impose a fine on me or to point out to me some rate that was applicable to keep my line; nothing.]

"Telmex reconoce el pagado del servicio, pero de todas formas lo suspende." (esp000218) [Telmex recognizes that the service was paid for, but it suspends it anyway.]
In contrast to the topics of access, speed, and disconnection, the recurrent appearance of the topic of contract for services was unexpected. In the first years, the consumers' claims focused mostly on two issues: first, on the bureaucratic and time consuming process required to get plain telephone service and second, on the difficulties faced by consumers to force Telmex to actually fulfill its side of the contract and provide services under the time and conditions established in it. The following quote illustrates the frustration of consumers regarding the contracting process:

"El día 13 de febrero del presente, después de casi un año de tramites en dicha empresa, me fue otorgado el servicio de conexión..." (esp930817)  
[On February 13 of this year, after almost one year of going through the formalities [to obtain a line] in this company, the connection was granted to me ...]

"A mi regreso a México. . . me vi envuelto en la penosa, costosa e interminable maraña burocrática para conseguir una línea telefónica." (esp951230)  
[When I returned to Mexico. . . I found myself mixed up in the painful, expensive and endless bureaucratic tangle [that exists] to get a phone line.]

Some of the issues regarding the fulfillment of contracts during the first years were closely linked to problems with speed of installation of service and with recurrent problems of line failure that kept consumers disconnected for long periods of time. These problems tended to make consumers wonder about the responsibilities that Telmex had as part of the service contract and the need for clearer terms. For example:

"Creo que si uno paga una línea y le siguen cobrando renta mes a mes, Telmex tiene la obligación de reparar el cable o dar una nueva línea." (esp93219)  
[I believe that if one pays for a line and they continue to charge you for rent month after month, Telmex has the obligation to repair the cable or to provide a new line.]

"¿Por que no contamos los usuarios con un contrato donde se señale claramente nuestros derechos y obligaciones respecto a la empresa?"(esp950627)  
[Why don't users have a contract where our rights and obligations with respect to the company are clearly pointed out?]
After 1996, complaints about contracts for new services—mobile and later on, Internet—and from new providers, particularly long distance providers, began appearing. The concerns, however, were somewhat different from those of the first years. The letters still referred to issues of asymmetric information between consumers and the companies regarding the content of the contract, but in this period the concerns are about services provided that were not agreed upon originally, as well as about difficulties in canceling service contracts with providers which had slammed consumers, continued charging consumers after the end of the contract, or did not state clearly the penalties for early cancellation. For example:

"Yo jamás firmé papel aceptando estas mañosas condiciones" (spe991024)  
[I never signed any paper accepting these cunning conditions]

"Unilateralmente, Telcel decidió continuar el contrato (sin teléfono en servicio) y siguió mandando factura."(Esp010330)  
[Unilaterally, Telcel decided to continue the contract (without having a telephone in service) and it continued sending a bill]

"Lo lamentable es que por el contrato que lo obligan a firmar, se encuentra uno amarrado a seguir aguantando este servicio hasta el término del mismo." (spe980105)  
[It is lamentable that because of the contract that they force you to sign, one is bound to continue tolerating this service until [such contract] ends]  

In sum, when referring to contracts, consumers argued that contracting telephone services with Telmex was a time consuming and bureaucratic process and that Telmex tends not to fulfill its obligations under such contracts.

**Waitlisting**

The results for the criterion of waitlisting were surprising because of the low number of letters that referred to this prevalent problem at the time of Telmex's privatization. Although few in number, the letters referring to the time consumers
waited to get a phone line provide an outstanding picture of how difficult and time consuming it was to get access to the network in Mexico previous to Telmex's privatization and even well into the private monopoly period. Of the 14 letters that referred to this issue, five had requested a line in the early 80s and were still waiting for it 10, 12 and even 13 years later. Another consumer requested his line in 1990 and was still waiting for it in 1994. It is very telling that some of the references to the waiting list emphasize the unapologetic attitude of Telmex's employees, which from the point of view of the consumers seemed to have added insult to injury. One letter points out in this respect:

"y acudí a las oficinas [de Telmex], pero su respuesta fue 'No hay', y 'Ni para cuando'" (esp911125)
[I went to the business offices [of Telmex], but their answer was 'there are [no lines]', and 'who knows when [there would be some available]'

"y fui informada que no tenía caso que estuviera dando vueltas, ya que me informarían vía correo cuando hubiera líneas disponibles" (SPL970609)
[I was informed that there was no point for me to keep going [to their offices], since they would inform me by mail when there were lines available]

The analysis of connectivity results underscores the consumers' dissatisfaction with the level of performance provided by Telmex during the private monopoly period and even after the entry of new competitors. From an argumentative perspective, the consumers' primary claim with respect to connectivity was that Telmex failed to fulfill its responsibilities towards consumers in terms of the speed of connection and the level of connectivity it was supposed to provide after its privatization.
Affordability

In a country such as Mexico, where a large portion of the population earns between one and two minimum wages per month, I expected that affordability would be a recurrent performance criterion mentioned in the letters. My hypothesis was that a considerable number of consumers and even potential consumers would complain about the cost of installation and service, as well as about any rate increases announced by Telmex. Consumers did complain, but this was the category of performance were they complained the least, with only 11 percent of the total sample of letters. Affordability complements the information obtained from the dimension of connectivity.

Connectivity, and within it access, provided a framework to understand the importance of having telephone service in a country where other basic services, such as water, electricity, and education are also badly needed. Affordability adds a new element to this framework by showing us the lengths to which consumers may go to gain access and remain on the network. While coding units of analysis for affordability, three different subcategories emerged: burden, which focused on the impact that paying for telephone services represents to consumers; rate increases, which includes complaints about changes in the rates for different telephone services, and charges and debts, which came out as a result of the impact of the economic crisis of 1994 on the ability of consumers to pay their bills. Figure 6.10 illustrates the distribution of consumer letters among these three categories of affordability from 1991 to March of 2001.
Not surprisingly, of the three subcategories mentioned above, rate increases was the one that received the most attention in consumer letters about affordability, with 54 percent of the total; burden and charges followed with 23 percent of the letters each. As for the changes over time, Figure 6.10 shows that, with the exception of the category of rate increases that appears almost throughout the whole ten years included in the analysis, burden and charges were a reaction to the financial struggles of consumers after the economic crisis and the high level of disconnections during the competitive

![Figure 6.10: Distribution of consumer letters by category of affordability (1991-2001)](image-url)

Figure 6.10: Distribution of consumer letters by category of affordability (1991-2001)
period. In fact, the category of charges and debts does not appear but until 1996, when the wave of disconnections by Telmex began. The link between the dimension of affordability and the impact that disconnections had on consumers is also supported by the fact that the number of letters referring to the three categories of affordability began increasing around the same period of time as disconnection did (1996 to 1998).

Affordability complemented connectivity in another interesting way. Whereas in their references to connectivity—with a few exceptions in the category of access—consumers addressed the issue as a problem that affected them as individuals, in the dimension of affordability consumers tended to see the issue more often as a problem affecting the population as a whole, particularly when referring to the category of burden. For example:

"sin el menor respeto a la población, incrementan sus tarifas incesantemente" (spe991015) [without the least [sense of] respect to the population, they increase their rates incessantly]

"Si de verdad alguien le dio este privilegio a Telmex, de cobrar por una reconexión de una línea más de cuatro veces el costo de la renta mensual, lo hizo sin considerar a los millones de usuarios que pueden pasar por un periodo económico difícil." (esp000604a) [If truly somebody gave Telmex this privilege of charging for reconnecting a line more than four times the cost of the monthly rent, they did it without taking into consideration the millions of users that might be going through a difficult economic period.]

I consider that this ability of consumers to abstract from an individual problem those conditions that, in their opinion, may constitute a social problem is a fundamental aspect of their argument about the public interest, which is discussed in the following Chapter.

In Chapter 5, I developed three hypotheses regarding the dimension of affordability. The three hypotheses were supported by the data, as is discussed below.
**Hypothesis:** Consumers will complain about rate increases, particularly for installation and local service, which make access to the service a greater burden to them.

As illustrated in Figure 6.10, complaints about rate increases appeared during almost all the years included in the analysis, with the exception of 2001. The peak in the number of complaints about increases in 1996, 1997, and later on in 2000 seems to underscore the sensitivity of consumers to changes in rates. Figures 5.7 and 5.8 show that during 1996 and 1997 Telmex sharply increased its rates for residential and business measured service and monthly rent as part of the process of rate rebalancing. In 2000 the freeze on Telmex's installation charges for residential service was eliminated, which might explain the increase in complaints during this year.

Consumers were eloquent about the impact that these increases had on their ability to afford the service. This trend became particularly noticeable during the years of the economic crisis and then it was extended to the competitive period as a result of the high number of line disconnections. In their letters consumers argued that the combination of rate increases and decreased purchasing power as a result of the crisis imposed a burden on their finances:

"El servicio es demasiado caro dentro de la crisis que se esta viviendo." (esp950425) [The service is too expensive during the crisis that we are living through.]

"se erogan descomunales sumas para tener teléfono" (esp951230) [enormous sums of money are spent to have telephone [service]]

"Hemos pedido prestado para cubrir el importe de ellos, pero este mes ya no." (spc980323) [We have borrowed money to cover the balance of [the bills], but this month we won't anymore.]
Although rate rebalancing was a necessary step in the process of institutional reform, the increases in local telephony were interpreted by consumers as a form of betrayal on the part of the government and one more abuse of the monopoly power of Telmex. As is discussed below in the section about themes, the government, which consumers assumed should protect them, is seen as a supporter of Telmex and, even when indirectly, of its abuses. For example:

"porque con estas alzas injustificadas[el gobierno federal] permite castigar a nuestra ya de por si deteriorada economía" (spl970603) [because with these unjustified rises [the federal government] allows [Telmex] to punish our already deteriorated economy]

**Hypothesis**: Residential consumers will complain more about rate increases than business subscribers.

This hypothesis was fulfilled in the data. Residential consumers sent 95 percent of the letters in which rate increases or debts and charges were mentioned. Only three letters were written by business customers. Statistically, there was a significant difference in the number of letters of complaint about rates sent by the two groups with an alpha level of .05 \[X^2 (1, N = 18) = 5.56, p < .05\]. The difference between the two groups might be due to several factors. First, that some increases were higher for residential service than for business service. Another possibility is that the burden of the increases was easier to handle for businesses than for individual residential subscribers. This is supported by the fact that only four of the letters in which consumers complained about disconnection for late payment came from business subscribers and all of them expressed the view that the disconnection was unjustified.
*Hypothesis: Consumers will express discontent about disconnections due to lack of payment.*

This final hypothesis was also supported by the data. The category of charges and debts captured how overwhelmed consumers were as they saw the balance amount in their bill grow from one month to the next. Since many of them began being unable to pay the whole balance, their debt also grew, finally ending in disconnection.

"*Era un adeudo de 600 pesos, pero ahora de mil 800 pesos, la deuda creció.*" (spa980729)  
[It was a balance of 600 pesos, but now it grew to one thousand 800 pesos, the debt grew].

"*Tal vez crezca inimaginablemente la cuenta*." (esp010330)  
[The balance may grow unimaginably]

It is important to point out that for some consumers paying for reconnecting their telephone lines implied a large burden. They not only had to pay their balance, but also a reconnection fee that for some subscribers represented a month's salary. For example:

"*Me vi imposibilitada de pagar el recibo telefónico del mes de mayo del presente año. El recibo siguiente fue más alto y más difícil aún el cubrirlo, por lo que el servicio me fue suspendido parcialmente. Mediante un gran esfuerzo,...solicitó mi salvo deudor y lo liquidé 911.26 pesos; al día siguiente el servicio me fue restablecido totalmente. Sin embargo, el gusto me habría de durar muy poco: el 16 de julio mi teléfono "se murió", aparentemente.*"  
(esp960919)  
[I was unable to pay the phone bill for May of the current year. The next bill was higher and even more difficult to cover, because of which my service was partially suspended. Making a great effort, ... I asked about the balance that I owed and liquidated it: 911.26 pesos; the next day the service was reestablished completely. However, the pleasure would last me very little time: On July 16 my telephone line seemingly "died").

This cycle of rate increases-inability to pay-indebtedness-disconnection faced by low-income consumers in Mexico points out the importance of developing some alternative methods of payment that would allow current subscribers to pay their debts and remain in the network.
In sum, the process of rate rebalancing in Mexico, together with the aftershock effects of the economic crisis, had strong effects on the financial resources of consumers in this country and increased the burden of having access to telephone service and remaining in the network. Residential consumers appeared to have been affected the most by this trend. In terms of claims, consumers, particularly those with residential lines, argued that the fast pace of rate increases set by Telmex had imposed a large burden on them, to the point of forcing them into facing disconnection.

**Quality of service**

*Hypothesis: Consumers in Mexico will be very vocal about quality of service in their letters to the editor.*

As expected, consumers were very vocal about problems with the quality of telephone service in Mexico. However, it was unexpected that the number of consumer complaints about this dimension of performance would be so much higher than that for the other three dimensions. Consumer claims about quality of service covered four different aspects of service: (a) general opinions about the quality of service provided by an operator, especially Telmex; (b) equipment-oriented quality of service problems; (c) people-oriented quality of service problems; and (d) issues of billing and collection. The distribution of consumer letters among these categories, illustrated in Figure 6.11 below, shows a clear change in the categories of quality that were emphasized by consumers in their evaluations of performance during the private monopoly period and the competitive period.
In general, problems with the general quality and equipment-oriented quality of service dominated the letters of consumers during the years that Telmex had a private monopoly; on the other hand, people-oriented problems and complaints about billing and collection became more important for consumers as the competitive period began. Of these four categories, complaints about the problems with Telmex's equipment received the most attention from consumers throughout the ten year period of analysis,

Figure 6.11: Distribution of consumer letters by category of quality of service (1991-2001)
with 30 percent of the total number of letters referring to quality of service. People-oriented problems occupied the second place with 25 percent of the letters, and it was the category of service for which consumer complaints were consistently high during the ten years included in the analysis. Billing and collection problems followed close, with 22 percent of the letters, and, similarly to the category of people-oriented quality of service, the number of complaints about billing remained at a relatively constant level during the ten years of the analysis, with a peak in the 1996-1998 period. Finally, general complaints about the service provided by Telmex ranked fourth, with 16 percent of the total number of letters referring to quality of service. The remaining seven percent includes scattered letters referring to problems with slamming, misleading sales information and new services and technologies.

**Hypothesis:** Consumer complaints about equipment-oriented quality of service will decrease over time as a reflection on improvements in this area. On the other hand, complaints regarding people-oriented problems will decrease at a lower pace than those for equipment-oriented criteria.

The distribution of letters illustrated in Figure 6.11 supported this hypothesis, with a few caveats. The number of complaints about problems with equipment did decline considerably by 2001 relative to the first years of the private monopoly period, but this decrease did not follow a steady descending trend. On the contrary, the number of complaints about general quality and problems with equipment increased constantly relative to the 1991 level until peaking in 1994. The economic crisis years marked the beginning of a decreasing trend until both categories reached their lowest point in 2001.
Interestingly, the descending trend in the number of complaints about equipment-oriented quality of service that began in 1995 seems to contradict the OECD's report (1999) that Telmex's quality of service declined after 1994. It is possible that the disparity between the consumers' perception of performance and the performance results reported by OECD might be due to differences in the areas of quality that consumers either pay attention to or are able to detect. For instance, OECD reported a decrease in performance in the criterion of "answer seizure rates", that is, on the number of long distance phone calls that reach their destination. The fact that this particular criterion refers to long distance calls already reduces the number of consumers that might have faced this problem. Also, it is possible that consumers in Mexico are less sensitive to the quality of service provided for certain technical standards than others.

For example, if consumers are used to facing major quality of service problems such as lines out of service, other less noticeable failures, such as getting a dial tone in more than four seconds, might be insignificant or imperceptible. I consider that as consumers in Mexico begin to get used to the improvements already achieved in important equipment-oriented aspects of quality of service, such as speed of repair, out of service lines, and repeat trouble reports, they will become increasingly sensitive to less obvious areas of quality of service that are evaluated based on the number of seconds in which they are provided, such as dial tone, call completion, and operator handled calls.
In general, consumers' complaints about equipment-oriented quality of service revolved around three major problems: line failure, the waiting time to get troubles fixed after being reported to the operator, and faulty repairs that resulted in repeat problems. Of these three areas, line failure received the most attention, with 142 letters of complaint. Similarly to the trend in connectivity, consumers' complaints about these three problems reached their peak in the years 1993 and 1994, pointing out once more that even when Telmex was meeting most of the targets set in the Concession Title for these years, consumers did not perceive those improvements; quite to the contrary, they became increasingly frustrated about Telmex's failure to improve after its privatization.

In the area of line failure, most of the complaints were about out of service lines, intermittent service, and noise due to wiring problems, "drowned" wires, or fallen poles. Once again, time appeared as a factor that worsened the problem, as consumers had to be without regular telephone service for long periods of time. This problem affected urban and rural, residential and business lines. For example:

"Mi teléfono, como miles en el país, está muerto, con los consiguientes daños y prejuicios" (esp940519B.txt)
[My telephone, like thousands in the country, is dead, with the consequent damages and prejudices]

"Nuestra queja por el servicio deriva de que constantemente sufrimos de descomposturas o fallas de línea telefónica, ya sea por causas internas de la dependencia o causas externas, como rompimiento de cables, caída de postes, etcétera" (esp931221.txt)
[Our complaint about the service derives from the fact that we constantly have disrepairs or phone line failures, either due to causes within the house, or to external causes, such as broken wires, fallen poles, etc.]

"Desde hace aproximadamente cuatro meses la comunidad de Coronel Tito Hernández, Puebla (antes Ma. Andrea), que se encuentra situada entre las ciudades de Huauchinango, Puebla y Poza Rica, Veracruz, carece de servicio telefónico" (esp960314.txt)
[For approximately four months, the community of Colonel Tito Hernández, Puebla (before Ma. Andrea) which is located among the cities of Huauchinango, Puebla and Poza Rica, Veracruz, hasn't had phone service]
Similarly, complaints about repair focused on the waiting time for repairs, which ranged from a couple of weeks to a year after the time a problem was first reported. Based on information provided by Telmex employees to some consumers, it seemed that during 1992 and 1993 Telmex directed its personnel to focus on the installation of new lines, rather than on attending trouble reports or requests for change of address. This strategy may explain the long waiting time for repairs during the first years of the private monopoly period.

It should be noticed, however, that as the years went by, the length of time that consumers had to wait for a repair shortened, and by 1996 repairs were made within a couple of weeks and in extraordinary cases within a few days. Yet Telmex's performance was still well beyond the "standard" 48 to 72 hours that, according to its employees, Telmex needed to conduct repairs. With the entry of new competitors, complaints about the quality of their service began appearing also. Although the number of complaints about the competition is still lower than those for Telmex, in 2000 and 2001 the numbers are almost the same for Telmex and for its competitors. In the case of competitive providers, line failure was also the area that consumers complained the most about. Other trends in this area were complaints about service repairs that resulted in new problems in nearby lines, as well as difficulties faced by consumers while reporting troubles on Telmex's phone repair system, called 05, and at the company's business offices, as illustrated by the following examples:

"a pesar de mis diarias llamadas al 05 no he recibido ninguna atención de Teléfonos de México." (esp930806.txt)
[in spite of my daily calls to 05, I have not received any attention from Teléfonos de Mexico.]
While the complaints about equipment-oriented service problems peaked during the first years of the private monopoly period and then began waning, people-oriented complaints were more evenly distributed throughout the period of analysis. The stickiness of problems with the personnel's attitudes as reflected in consumers' letters provides support to the statement of Marie Rouland, France Telecom general director for Mexico, about the difficulty of changing the culture of service in Telmex's personnel so as to be "more commercial and more efficient" (Blears, 1994). Consumer complaints about people-oriented quality of service revolve around three topics: the service provided, the attitude of customer service personnel towards customers at Telmex's business offices, and the level of knowledge of the personnel. Of these three areas, service was the most criticized, with 108 letters referring to this topic, the third highest number within the dimension of quality of service.

The distribution of letters about people-oriented problems illustrated in Figure 6.11 shows two peaks in the number of letters sent by consumers. The first peak occurred in 1993, a year in which discontent about the high number of lines out of service forced many subscribers to call or visit Telmex's customer service offices regularly. The lack of solutions to their complaints, coupled with rudeness or indifference on the part of employees, may explain this peak. The second and highest
peak occurred in 1997, at the beginning of the competitive period, due to a jump in the number of complaints about Telmex's people-oriented service, which increased from 4 in 1996 to 21 in 1997. Similarly, complaints about the attitude of Telmex's employees toward customers increased from 5 in 1996 to 11 in 1997.

This sharp increase was the compounded result of simultaneous problems with billing for measured service, increases in local service rates, the first occurrences of slamming as the new long distance competitors began providing service, and an increased number of disconnections. As in 1993, subscribers had to call or visit the customer service offices of Telmex and now of the new long distance competitors to try to find a solution to their problems. In analyzing consumer complaints about service, many recurrent themes began emerging, such as the lack of solutions to problems; the feeling of impotence on the part of consumers; the inefficiency of Telmex's customer service and repair personnel; and the dissonance between the promises made by Telmex's officials about service and the actual service provided by its employees, among others. Although these topics are discussed further in the results section for themes, the following quotes provide an example of these trends:

"Deseamos que usted sí nos resuelva nuestro problema de comunicación, ya que su personal no quiere trabajar ni para nosotros ni para Telmex." (spe971030.txt)  
[We would like for you to resolve our communication problem, since your personnel don’t want to work for us or for Telmex]

"¿No habría manera de que sus eficientes técnicos dejaran un momento de comer tortas en las calles y se pusieran a trabajar?" (spe981208.txt)  
[Wouldn’t there be a way for your efficient technicians to stop eating tortas on the street for a moment and to put themselves to work?]

"y ratifica el trato que se le da por Telmex a sus usuarios de no dar respuestas a sus quejas, no obstante la publicación realizada y las promesas recibidas." (spl980112.txt)
[it ratifies the treatment that is given by Telmex to their users of not providing answers to their complaints, notwithstanding the publication [of their complaints] and the promises made.]

It is important to point out that even while the complaints about service and attitude increased in 1997 and 1998, the letters reflect some positive changes in the attitude of Telmex's customer service employees during these years. Consumers make a point out of being attended with politeness, even though their problems may not be solved to their satisfaction, and as stated above, trouble reports are attended to in a few days. This is a drastic contrast to letters in the first years of the private monopoly, when the visit of a repairman could take months after submitting the complaint in order to get the problem fixed. In sum, although indirectly, consumers provide in their letters evidence of improvement in Telmex's people-oriented quality of service during the competitive period, especially in the areas of speed of repair and politeness. In general, the consumers' claim about quality of service was that Telmex's service was inefficient because it was unreliable and the speed of repair for trouble reports did not satisfy consumer needs. With respect to the personnel, consumers mainly argued that they were abusive and incompetent.

**Hypothesis**: The introduction of detailed billing will result in an increase in the number of complaints regarding billing errors.

This hypothesis was not confirmed by the data. Although the number of complaints about billing was at its highest point in 1998, with 20 letters (see Figure 6.11), there is no increase relative to 1997 to support the effect of itemized billing on
the number of consumer complaints. Based on the data provided in the letters, the
increase in the number of letters about billing and collection from 1996 to 1998 seems
to be once again related to rate increases, particularly in measured service, as well as to
problems with collection that ultimately resulted in disconnection. In fact, the number
of complaints about unjustified increases in the number of calls charged under measured
service was so high that I considered it necessary to code them separately from other
billing problems.

As a result, the category of billing included three topics: (a) errors in general
billing, (b) errors in measured service, and (c) problems with collection, including
credits and adjustments for periods of time when the consumer's line was out of service.
Of these three topics, collection problems received the most attention, with 86 letters,
followed by general billing problems with 62 letters and measured service with 38
letters. As in the case of people-oriented quality of service, billing and collection had a
relatively constant flow of letters throughout the ten year period, with a peak from 1996
to 1998. This peak coincides with the increase in the number of letters received by
Profeco, the Consumer Protection Agency in Mexico, illustrated in Figure 5.13, which
provides some support to the assumption that the sample of letters published in Space of
the Reader, on which this study is based, represents a good proxy to the formal
complaints submitted by consumers to Profeco and Telmex.

An interesting trend transpired in the letters regarding billing and collection.
Consumers were very vocal about Telmex's policy of requiring full payment of a bill's
balance even when consumers had disputed some of the charges. This practice was
considered unjust not only because it required consumers to pay for unrecognized 
charges, but also because Telmex would not conduct any inquiries on the disputed 
charges until the subscriber had paid the balance in full.

The impact of this practice on consumers' finances was intensified by the fact 
that Telmex was very slow in processing adjustments and providing credits to 
consumers, even when required by the Concession Title to do so and when some of the 
problems were actually Telmex's mistakes. For consumers, these practices were 
evidence of the level of corruption within Telmex and even within the government that 
allowed Telmex to operate in this fashion. Some consumers stated in this respect:

"Además, el que Teléfonos de México esté cobrando mensualmente renta por muchísimos 
teléfonos que no funcionan bien o que tardan días, semanas, o meses sin proporcionar 
servicio alguno, es un gran fraude que están permitiendo nuestras autoridades." 
(esp920116)  
[Besides, the fact that Teléfonos de Mexico is charging monthly rent for many telephones 
that don't work well or that have not provided any service for days, weeks, or months is a 
great fraud which is being allowed by our authorities]

"Nuestra empresa es la que finalmente queda afectada pues su imagen queda seriamente 
dañada al mostrarse morosa en un pago que de por si ya hicimos y no sabemos quién, 
montado en brioso corcel, lo jinetea." (esp960917)  
[Our company is the one that is affected at the end because its image is seriously damaged 
when shown as being in debt for a payment that we already made, and we don't know who, 
mounted in an energetic steed, is 'riding it around']]10

"Investigar, supone mirar los cables pero también, auditar el sistema informático, analizar 
y comprobar la relación de las llamadas, cerciorarse de que no existe fraude o corrupción, 
etcétera." (spl980929).  
[To conduct an investigation supposes checking the wires but also, auditing the computer 
system to analyze and to corroborate the list of calls, making sure that there is no fraud or 
corruption, etc.]

In this sense, the complaints about billing and collection practices underscore 
that the improvements in billing accuracy required by SCT by 1994 as part of Telmex's 
Concession Title are, from the perspective of the consumers, far from being fulfilled.

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Billing disputes brought to the forefront another recurrent theme in consumer letters, which was the lack of evidence on the part of the consumer to support their claims about incorrect charges. This topic is discussed in the following section about themes, but it is important, as it makes evident the need for better rules about disputes and adjustments, as well as for policies regarding disconnection for not paying the disputed portion of a bill. In its current form, according to consumers' claims, Telmex's practices are definitely biased against consumers. In this sense, the effort of SCT and Cofetel to develop meters for consumers to oversee their use of measured service represents a good step forward in trying to provide some consumers with some tools to support their claims in resolving disputes with Telmex and the new local service providers. In sum, consumers claimed that Telmex's practices in the area of billing and collection were unjust towards consumers because Telmex tended to make mistakes that consumers had difficulty in correcting.

**Hypothesis:** Mobile services and new technologies will become topics of complaint as the penetration of these services increased.

This hypothesis was supported by the data. However, the number of letters referring to new services, such as mobile telephony and later, Internet services, was small relative to that of plain old telephone service. Only 23 letters (7.8%) referred to either of these services. In general, complaints about mobile telephony touched upon the same three areas of quality of service as in local telephony. Consumers complained about faulty telephones and about added services, such as voicemail and call waiting, that did not function correctly or that were charged to consumers even when they did
not request them. Problems with billing and with the bad attitude of Telcel's and Iusacell's employees were also mentioned. It is interesting that even when the quality of service in mobile telephony deteriorated after the introduction of CPP in 1999 due to increased traffic, only two letters about mobile telephony mentioned difficulties completing calls or having interrupted calls after this year. For instance:

"como si no fuera ya una odisea el tiempo de conexión y las llamadas caídas"
(Esp010116.txt)
[as if the time it takes to connect and the interrupted calls were not already an odyssey]

"Desde el inicio del contrato, cada vez que salgo de mi región no puedo tener acceso al buzón de voz." (Esp000710.txt)
[From the beginning of the contract, each time I go out of my region I cannot get access to the voicemail]

In internet services, the delivery of computers acquired by consumers as part of Telmex's package to get access to the Internet dominated most of the letters referring to this topic. Some of the letters also referred to difficulties in connecting to Telmex's server and the technical limitations of Telmex's phone lines to provide fast internet service. Telmex's bad service for standard internet connections was interpreted as a strategy of the company to lure subscribers into more expensive and faster connection packages. One consumer stated in this respect:

"Muy probablemente Telmex-Prodigy quiere desesperar a sus clientes para que adquieran su llamado servicio turbo" (Esp000511.txt)
[Most probably Telmex-Prodigy wants to exasperate its clients into acquiring its so-called turbo service].

In sum, quality of service was the most important performance criterion for consumers in Mexico, based on the number of letters and units of analysis they dedicated to it. Although consumer concerns regarding quality of services have
changed over time, shifting from problems with equipment-oriented quality to people-oriented quality and billing, and increasingly have also included complaints about new services, some recurrent claims emerged in their complaints, such as issues of time, inefficiency, abuses of power and lack of solutions, among others. The coincidences in distribution of letters about quality of service with respect to peaks in connectivity and affordability seems to emphasize the fact that access to telephone service cannot be constrained to performance on connectivity, but that it is rather the collective result of performance in the different dimensions included in this study.

**Innovation and choice**

The final dimension of performance is innovation and choice. Since the introduction of new services and the trends identified in the consumers' complaints about new services were already discussed in the sections above, in this last section I focus on the results for the dimension of choice. As discussed in Chapter 5, choice refers to the availability to consumers of options for the supply of service, as well as to access to different types of services and technologies in telephony. To identify the concerns of consumers regarding choice, their letters were coded into three categories: suppliers, services, and technology. The distribution of letters from 1991 to March of 2001 for these categories of choice is illustrated in Figure 6.12 below.

Among the different dimensions of performance, choice ranked third, after quality of service and connectivity, but surprisingly higher than affordability, as illustrated in Figure 6.7. The analysis of results for connectivity, quality, and
affordability points out that consumers were quite discontented with the service provided by Telmex during the period of private monopoly. In this sense, it is perhaps not so surprising that having access to other suppliers was perceived by consumers in Mexico as a more salient issue than the inevitable increases in rates. Having a choice of suppliers, consumers argued, was the ultimate solution to all the problems caused by Telmex.
**Hypothesis:** The majority of letters about choice will refer to the importance of having access to a choice of suppliers in the different telecommunications markets.

As illustrated in Figure 6.12, of the three categories of choice, suppliers received the most attention from consumers with 88% of the letters referring to choice, thus confirming the hypothesis stated above. In contrast, the categories of technology and services were mentioned in only 6% of the letters respectively. As in the case of connectivity and quality of service, the distribution of letters about choice of suppliers shows increases in the number of letters at two points in time. The first peak was once more in 1993, during the years of the private monopoly, followed by a second peak in 1997-1998, once the new competitors in long distance service began operating. This temporal coincidence underscores the close relationship that consumers perceived between the performance of Telmex in quality of service and connectivity during the private monopoly and the need to have more and better choices available.

Similar to the case of quality of service, the concerns of consumers regarding choice changed once competition began and they finally had access to the services of the new long distance providers. During the private monopoly period, consumers perceived a connection between the fact that Telmex remained a monopoly and the lack of sufficient improvements in service after the company's privatization. By the same token, since the government allowed Telmex to maintain its monopoly status, it did not require a big leap for consumers to identify the government as a protector of Telmex and its abuses of consumers. Not having the support of the government on their side, consumers viewed themselves as victims of the monopoly.
Towards the end of the private monopoly period, consumers' references to choice began to change in tone. From a passive tone of victims trapped in a cycle of abuse, consumers shifted to a more active tone, threatening Telmex with changing providers if service did not improve:

"y si su empresa no se esfuerza por proporcionar un buen servicio, seguramente habremos muchos interesados en cambiar de compañía." (esp960314.txt)
[and if your company doesn't make an effort to provide good service, we will surely have great interest in changing companies.]

In 1997, many consumers made good on their threats and selected the new competitors to be their providers of long distance services:

"En ejercicio pleno de mis derechos, y con gusto, tomé una decisión informada: seleccioné a Alestra-AT&T."
[In full exercise of my rights, and with pleasure, I made an informed decision: I selected Alestra-AT&T.] (italics added)

Once having experienced the availability of choice in one service, consumers soon began expressing their urgency to expand such choices to other services, particularly to local telephony, where Telmex is still the most important provider. The references to the need to introduce competition in local service seemed to be prompted by a practice of Telmex mentioned in several letters during the competitive period.
According to several consumers, their charges for local measured service increased after selecting a new operator as their long distance provider; others complained that Telmex disconnected their line as a 'punishment' for changing companies:

"y quienes tuvimos la 'imperdonable osadía' de cambiarnos de compañía para realizar largas distancias, pues hemos pagado caro tal acción. . . . En caso de ser necesario, si ese es el castigo por haberme cambiado, me veré en la necesidad de regresar a Telmex hasta que se abra la telefonía local " (spe971027.txt)

[and we who had the 'unforgivable audacity' of changing our long distance company have paid a high price for such an action. . . . If it is necessary, if that is the punishment for having changed [companies], I will need to go back to Telmex until local telephony opens up [to competition]]

"Tengo la seguridad de que ese cobro lo hacen porque no me proporcionan el servicio de larga distancia y por desgracia para mí y fortuna para ellos, no hay otra empresa que preste el servicio local." (spl980120.txt)

[I am certain that that charge is made because they don't provide me long distance service and unfortunately for me and fortunately for them, there is not another company that provides local service.]

Regardless of whether the increases in measured service were the result of Telmex exercising its market power or just part of the rate rebalancing process that ended during the first years of the competitive period, what is more significant about the quotes above is that consumers perceived these practices as a form of retaliation and, as a result, they considered going back to Telmex. It is impossible to know how many of them actually shifted back to Telmex, but the important lesson is that for consumers to freely exercise their ability to choose and for competition to flourish, the ability of the incumbent to exercise its market power and to hold some control over consumers needs to be curtailed.

In sum, the results presented above have shed light on the consumers' sensitivity to changes in performance. While most of the hypotheses derived from actual data on Telmex's performance were supported by consumers' perceptions of performance
expressed in their letters, there were a few surprises, particularly with respect to the importance of affordability and to the impact of the crisis on the number of consumer complaints. The distribution of consumer letters from 1991 to 2001 supports the idea that connectivity is a necessary but not sufficient condition for access. For consumers it is the combination of the different dimensions of performance, that is, of connectivity, affordability, quality, innovation and choice that ensure real access to telephone service.

Themes

The results of the analysis of performance presented above provide a picture of the problems faced by consumers as users of telephone services in Mexico during the process of institutional reform. The theme coding looks at consumers from a different perspective. The analysis of recurrent topics that emerged in consumers' letters helped abstracting from them the issues that describe consumers not anymore as independent individuals with telephone problems, but collectively as an actor, as "members of the public", as "consumers". In this sense, consumers are viewed as participants in an ongoing relationship with other actors (the government, Telmex, and the new competitors) in a period of time colored by institutional reform in the sector. As such, the different themes unearthed from the letters could be thought of as pieces of a puzzle that, together, create a picture of the public interest argument of consumers in Mexico.

As part of the codification process for themes, each of the 2,821 units of analysis identified in the consumers' letters was categorized into one of twelve themes. In contrast to the subcategories for performance and values, the subcategories for themes were developed inductively; that is, these subcategories emerged from the analysis of
the texts and were identified based on the recurrence of ideas, concerns or topics expressed by consumers. Because these subcategories emerged from the texts there was not a set of hypotheses linked to them, as was the case for performance.

As a result, the analysis of themes follows a different pattern from that used in explaining performance results. The quantitative results of the theme coding are presented first, analyzing general trends in the distribution of letters and units of analysis among the different subcategories of themes. These results are then complemented with an analysis of the relations among themes that consumers tended to establish in their letters. These relationships are at the center of what in my opinion constitutes the consumers' argument about the concept of public interest, which is discussed in the following chapter.

Eleven themes were identified in the letters: Competition, consumer actions, consumer emotions, consumer evidence, definitions of self and others, efficiency, importance of telephone service, industry policies, people, power and rules. The category of 'other' was added to capture units of analysis in which consumers did not refer to any of these themes. The distribution of units of analysis and number of letters by theme is illustrated in Figures 6.13 and 6.14, respectively.

Even though the base unit used in figures 6.13 and 6.14 was different, the distribution by theme in both units was almost identical, with the themes of efficiency, consumer actions, people, and industry policies being referred to in 60 percent or more of the units. However, the results shown in both figures differ in two areas. First, in Figure 6.14 the distribution in terms of letters lowered the importance of the themes of
Figure 6.13: Distribution of units of analysis by theme
Figure 6.14: Distribution of consumer letters by theme
efficiency and consumer actions, while increasing by at least one percentage point the
weight of the remaining themes. Secondly, because of this change in relative weights,
four of the themes changed their ranking from Figure 6.13, expressed in units of
analysis, to Figure 6.14, expressed in letters. Based on units of analysis the subcategory
of people is ranked third, after efficiency and consumer actions, while in terms of
letters, industry policies surpasses people and is ranked third. Similarly, in terms of
units of analysis, the category of power ranks higher than definition of self and others,
while in terms of letters this relationship is reversed.

The distribution over time of units of analysis and letters by theme, illustrated in
Figures 6.15 and 6.16 respectively, reflected a bimodal pattern similar to that of the
performance results, with a first peak around 1993, during Telmex's private monopoly,
and a second, more pronounced peak around the beginning of the competitive period,
from 1996 to 1998. It is not surprising that the peaks in the results for themes and those
for performance tended to coincide, since it was during these two periods of decreased
performance that consumers tended to be even more vocal—in terms of letters sent, units
of analysis and the tone used—in expressing their opinions about the service provided by
the different operators, especially Telmex.

The noticeable prominence of efficiency over the other themes in Figures 6.15
and 6.16 could be anticipated since most of the letters in the sample were complaints
about the performance of Telmex and other service providers. At its highest point, in
1994, 97% of the letters referred to this problem. On the other hand, the drastic
decrease in the letters about efficiency from 162 in 1994 to 82 in 1995, in the midst of
the economic crisis, was rather surprising, particularly because this was a time of
Figure 6.15: Distribution of units of analysis by theme (1991-2001)
Figure 6.16: Distribution of consumer letters by theme (1991-2001)
decreased performance by Telmex, as discussed in Chapter 5. Yet this decrease also reflects the decrease in the total number of letters of complaint about Telmex published during 1995 and 1996 relative to the high point of 1994.

Another interesting trend observed in 1995 was that the themes that described what happened to consumers, such as efficiency, consumer actions, emotions, evidence, and people decreased in terms of units and number of letters relative to 1994, while those themes reflecting why these things happened tended to increase, such as definitions of self and others, power, competition, importance of telecommunications, industry policies, and rules. This seems to indicate that during the economic crisis consumers tended to reflect more often in their letters on the formal and informal institutions that, in their opinion, affected the level of performance of Telmex. Similar increases occurred in these categories in 1993, 1997, and 1998, years in which complaints about performance peaked in consumer letters. Thus, even when the themes of power, definitions of self and others, competition, importance, and rules were quantitatively less important than the rest of the themes, qualitatively they provide very valuable information about the factors that impede or promote the public's interest from the perspective of consumers in Mexico.

Finally, it is important to point out that the decline in the number of letters and units of analysis that occurred in 2000 and 2001 was influenced by the general decrease in the number of letters about Telmex and the new competitors that were published in El Espacio del Lector since 1999. This decline may be related to improvements in Telmex's performance, particularly in the criterion of equipment-oriented quality of
service. Another factor that influenced the decline during 2001 was that the sample of letters for this year was only partial, since it only included the letters that were published until March of that year.

In sum, the analysis of the distribution of letters and units of analysis by theme points out that industry performance—captured in the themes of efficiency, or better said, inefficiency of the telecommunications providers and of people (quality of customer service)—was the most important motivator of consumer complaints. From a qualitative perspective, efficiency and people were also important themes because they acted as catalysts for consumers to take action and, even more important for the purpose of this dissertation, they prompted consumers to reflect about the institutional practices that influenced such performance. In this sense, the eleven themes that emerged from the process of theme coding shed light on different elements of the consumers' argument about the public interest in telecommunications reform in Mexico (see Table 6.1 below). Themes such as efficiency, people, consumer actions, emotions and evidence give substance to the results of the coding for performance, and also function as evidence for consumers' arguments about institutional practices in Mexico, which are clustered in themes such as power, competition, industry policies, definitions of self and others, and rules. In this sense, as is discussed in the following chapter, some of the more concrete themes became an echelon in the argumentative structure of the public interest, functioning as arguments in themselves and as subordinate opinions or evidence for more abstract themes in higher levels of the argumentative ladder.
<table>
<thead>
<tr>
<th>THEME</th>
<th>PRIMARY CLAIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition</td>
<td>Competition provides consumers a solution to their problems with Telmex by giving them the option of exit</td>
</tr>
<tr>
<td>Consumer actions</td>
<td>Consumers take different types of actions in their effort to solve their problems with telephone service</td>
</tr>
<tr>
<td>Consumer emotions</td>
<td>No primary claim linked to it</td>
</tr>
<tr>
<td>Consumer evidence</td>
<td>Consumers lack access to evidence that is accepted as valid by service providers</td>
</tr>
</tbody>
</table>
| Definitions of self and others | Telmex is an abusive monopoly  
The government supports Telmex and not consumers  
Consumers are powerless victims of Telmex |
| Efficiency                   | Telmex provides service in an inefficient manner                                                                                             |
| Importance of telephone service | Telephony is a basic and necessary service for consumers                                                                                   |
| Industry policies            | Telmex exercises power through its policies and actions                                                                                      |
| People                       | Telmex's employees are uncooperative, rude, and incompetent                                                                                  |
| Power                        | Telmex exercises power over consumers                                                                                                         |
| Rulemaking                   | The government has failed to fulfill its role as trustee of the public interest  
Telmex's privatization did not improve performance as expected by consumers and promised in public discourse |

Table 6.1: Relation of themes and their primary claims

While coding for themes, it became evident early on that consumers concentrated their narratives around the actions and attitudes of three actors: the industry—focusing mainly on Telmex—, government agencies, such as SCT and Profeco, and finally, the consumers themselves. As such, the themes can be considered expressions of the consumers' perception of the relationship that exists between these three actors in Mexico. Because of the simplicity of this thematic organization and the importance of this relationship, I use it as a baseline for presenting the most important
trends found in the theme coding. Figure 6.17 illustrates the organization of the eleven themes by actor. This thematic organization is complemented in Chapter 7 with another that organizes the themes by their level of abstraction as an initial step toward the construction of what I propose as the consumers' argument about the public interest in telecommunications reform in Mexico.

Figure 6.17: Organization of themes by actor
The discussion of themes by actor begins with those themes that relate to the actions of the industry, because these actions elicited a response on the part of consumers; the themes that referred to the consumers' perspective are discussed next, and finally I analyze the theme of rulemaking, which captured the units of analysis that referred to the government.

**The industry: Themes and trends**

The themes that emerged in consumers' letters about the telecommunications industry reflect different aspects of the relationship that Telmex has with consumers and, more recently, with other service providers in the industry. As was discussed above, efficiency was the theme that consumers complained most about; yet from an argumentative perspective, of the five themes relating to the industry, power is the most important for this dissertation because it summarizes the perception that consumers in Mexico have of their relationship with Telmex and of the relationship that exists between Telmex and the new service providers. The connections that consumers made between the different industry-related themes are illustrated in Figure 6.18. The hexagonal purple boxes in Figure 6.18 represent the three actors involved in the industry-related themes: Telmex, consumers and the new competitors. Based on the consumers' letters, Telmex exercises power both over consumers and the new competitors. On the consumers' side, there is a sense of powerlessness that is engendered by their interaction with Telmex and, in certain cases, with other service providers. Consumers argue that Telmex expresses power through its policies and actions, and this power is experienced in their daily life through the company's
inefficient performance, as well as in rate increases, and even through the press, when consumers read about Telmex's high financial ranking and profit level among telecommunication operators.

Power inequality was felt most intensely, however, whenever the interaction between consumers and the service providers occurred at the interpersonal level through contact with the operators' employees at the repair service (05 in the case of Telmex) or at their business offices (although this occurred less often with the new competitors).
The sense of a lack of ability on the part of consumers to effect any changes in the imbalanced nature of their interactions with Telmex made them feel powerless before this company. As a consequence, consumers looked forward to the entry of new competitors in the different markets, and claimed that their entry would grant them the possibility of exit and of having access to a choice of suppliers, services, and technologies.

As to Telmex's competitors, consumers argued that Telmex exercised its power in two ways, directly through the creation of barriers to competition and indirectly through Telmex's reactions to the entry of new competitors in the long distance market that 'scared' consumers back to Telmex. Ultimately, the entry of the new competitors brought both positive and negative consequences to consumers. On the positive side, consumers claimed that the entry of new competitors resulted in lower long distance rates and better customer service provided by the new competitors; on the negative side, the most prevalent problem was slamming, which the competitors were accused of committing more often than Telmex.

To complement the information summarized in Figure 6.18, in the following two sections I describe the most significant aspects mentioned by consumers about their powerlessness in relation with Telmex and the role of the new competitors in the industry.
Section 1. Expressions of power inequality: The relationship between Telmex and its subscribers

This first section focuses on the left side of Figure 6.18 and provides a more in-depth description and examples of the different actions and policies through which Telmex manifested its power over consumers, according to consumers' claims. Of the four types of actions mentioned in Figure 6.18, the most common way in which consumers felt powerless before Telmex was through problems of inefficiency in the provision of service. Mainly, consumers put forward claims about their inability to obtain solutions to their telephone service problems in the manner and with the speed that they expected and considered appropriate for a large and profitable company like Telmex.

For consumers, the practices that showed Telmex's inefficiency were manifold. With respect to equipment-oriented quality of service, three recurrent themes expressed by consumers were: (a) time, (b) the contrast between the commitments made by Telmex and the actual results obtained, and (c) lack of solutions, a subtheme that summarized the problems with the lack of efficiency faced by consumers in their relationship with Telmex. On the other hand, in the area of people-oriented quality of service, captured in the theme of "people", three subthemes stood out with respect to the aspect of power: (a) lack of cooperation, (b) abuse, and (c) corruption. All these subthemes expressed inequalities between consumers and Telmex's employees and tended to intensify the consumers' sense of powerlessness. Some of the most important trends found in each of these subthemes are discussed below.
Time

Time appeared as a topic in 197 letters, that is, in 71% of the total number of letters in the sample, and was expressed in different forms, from long waiting lists for getting a new line to the weeks and months that were necessary to wait for an out of service line to get repaired; from long hours waiting in line to be served at Telmex's business offices to time wasted trying to report a problem at an operator's repair number. The periods of time waiting for repairs or new lines ranged from one week to ten years, with one month being the most common waiting time. Even though the topic of time reached its peak in 1994, it was still a problem in 2001, now linked to waiting time for the delivery of computer systems and the waiting time to connect to the internet. Some examples of reference to time are:

"A mas tardar mañana", ha sido la constante que he recibido" (esp951022.txt)
["No later than tomorrow", this has been the constant (response) that I have received]

"Cuando he tenido la mala idea de contactar a su soporte técnico, he pasado en el teléfono hasta 20 minutos" (esp000511.txt)
[Whenever I have had the bad idea of contacting your technical support, I have spent up to 20 minutes on the telephone]

"y me dieron esperanzas de que para noviembre de 1991, 17 meses más tarde, tendría noticias de ellos." (esp911125.txt)
[and they gave me hopes that by November of 1991, 17 months later, I would get some news from them.]

Also related to the topic of time was the contrast that consumers made between the long time it took Telmex to provide new lines or repair faults with its efficiency in billing and collection, with bills punctually arriving to the house of consumers that had lines which were out of service, disconnected or with connection problems. For example:
In general, consumers argued that Telmex was efficient in the areas that benefited the company, such as billing and collection, but not so in those criteria that consumers considered important, such as meeting appointments on time, providing service within the timeframe established in their contracts, and providing fast customer and repair services.

_The gap between promises and actions_

The topic of time is closely linked to that of Telmex's failure to meet the promises made by the company and its employees. In 20 percent of the total sample of letters consumers put forward their claim that there was a gap between the commitments Telmex made for the provision of service and the actual performance of the company. Some manifestations of this gap appeared in complaints about missing appointments for installation and repair, in letters about marketing slogans that "didn't ring true", and of stated company policies that were not implemented in Telmex's daily
activities. The failure to fulfill promises was not limited to Telmex, and also applied to the new competitors once they began providing services. Some examples of references to broken promises in consumer letters are:

"Menos nos hacen sentido los mensajes publicitarios que aparecen en distintos medios donde se habla del nivel de 'eficiencia' alcanzado, ni las promesas del director general de reparar cualquier problema en 'menos de 48 horas'. Todo ello no es más que una burla." (esp930610.txt)

[It doesn't make any sense to us [to read Telmex's] advertisements in different media which refer to the level of 'efficiency' achieved, nor the promises of the director general of repairing any problem in 'less than 48 hours'. All this is nothing but a joke.]

"Durante estos diez años han sido únicamente promesas las que nos ha brindado Telmex" (esp950820.txt)

[Telmex has only given us promises during these past ten years]

"y nos firmó comprometiéndose a arreglar el asunto, indicándome que en cinco días me darían una respuesta a esta petición, su respuesta aún la sigo esperando. ¿Por qué se promete y no se cumple mi petición?" (spl980112.txt)

[and he signed, committing himself to fix the problem, telling me that in five days they would give me an answer to this request; I am still waiting for his answer. Why do you make a promise and do not grant my request?]

"Cuando el trabajador de Nextel se retiró dijo que nos llamaría o vendría en otra ocasión para darnos la solución, pero hasta el 28 de diciembre pasado no nos había visitado" (esp010104.txt)

[When the worker from Nextel left he said that he would call us or he would come back to give us a solution, but until December 28 he had not visited us yet]

The importance of these unfulfilled promises resides in the negative effects that they had on the relationship between the telecommunications operators and their subscribers. In particular, complaints about unfulfilled promises pointed to Telmex's failure to develop and maintain a sense of trust with its subscribers, which is a fundamental aspect of any relationship. Anthony Giddens (1990) defines trust as "confidence in the reliability of a person or system, regarding a given set of outcomes or events, where the confidence expresses a faith in the probity or love of another, or in the correctness of abstract principles (technical knowledge)" (p. 34).
In the case of Telmex, the constant breaking of promises has made consumers lose faith in the reliability of Telmex as a company, in its services, and even in the word of its administrators and employees. The abstract principles of efficiency and service, which consumers expected would be followed by Telmex as a private enterprise, failed to be implemented. As a result, seeing their trust betrayed again and again and lacking any options except to drop out of the network, consumers see themselves as forced to continue in a "bad" relationship, characterized by uncertainty and negative attitudes towards Telmex. These negative reactions are summed up in the theme of consumer emotions, which is discussed below in the section on consumer-related themes.

Lack of cooperation

One of the aspects that frustrated consumers the most was the indifference and lack of cooperation demonstrated by the operators' employees, particularly those of Telmex. Similar to the case of unfulfilled promises discussed above, the frustration of consumers about the non-cooperative attitude of the operators' personnel stemmed, in my opinion, from unfulfilled expectations. In this particular case the expectations that were unfulfilled had to do with basic communication principles.

When consumers turn to a customer service representative to report a problem or to request service they do it under the assumption that their petitions will at least be listened to and that such request will elicit some form of response from the representative. Grice (1975) points out that an important principle of all conversations is cooperation, which does not mean agreement, but that a speaker's contribution to a conversation is appropriate and willingly in-line with the purpose of the conversation.
According to Grice, cooperation is achieved when a speaker is truthful (quality maxim), and when he provides sufficient information (quantity maxim) that is pertinent to the context of the conversation (relevancy maxim), and does so in the clearest possible way (manner maxim). These maxims are often violated, sometimes for strategic purposes, requiring the participants to interpret the implication of such violations, e.g. irony, lies, et cetera.

Of the four maxims proposed by Grice, consumers paid particular attention to the maxims of quality and quantity. Consumers pointed out several cases in which asymmetries in information between consumers and operators violated the maxim of quantity. For example:

"y no dar ninguna explicación acerca de los cargos que efectúan, creyendo que los Mexicanos somos adivinos." (esp950807.txt)
[and they provide no explanation about the charges they bill for, trusting that we Mexicans are clairvoyants]

"pues el personal que atiende dicho número telefónico ni su nombre quiere dar." (esp960105.txt)
[the personnel that answer at this phone number don't even want to give their names.]
"Pero casi dos meses y medio antes se me ocultó esa información." (esp920121.txt)
[But almost two and a half months before, this information was hidden from me]

Violations to the maxim of quality were also recurrent, and were interpreted by consumers as an intentional violation on the part of Telmex to cover its inefficiency; as such, violations in quality tended to be interpreted as lies and mockery. The gap between promises and actions is a good example of this type of violation; other examples are:

"pues siguen las burlas en el seguimiento de nuestras quejas." (esp940725.txt)
[they continue with their mockery in the follow up of our complaints]
Manner was also a very important principle for consumers. For example:

"ya que nunca se me ofreció una respuesta concreta y sí, en cambio, un pésimo servicio." (spe991202.txt)
[I was never offered a concrete answer and instead [they provided] a terrible service.]

Yet the consumers' emphasis on the principle of manner was not so much in terms of clarity of communication, but on politeness as an indicator of respect and good service attitude. An important violation that showed consumers the poor service attitude of Telmex's employees was their lack of empathy and their indifference towards consumer problems. Much like the case of unfulfilled promises that resulted in mistrust, the indifference of service representatives seemed to impede any possibility of communication with consumers, thus violating a basic assumption of consumers about the purpose of customer service:

"a tener que pasar horas en un servicio incompetente de quejas tratando de aclarar sus inconformidades con gente grosera, prepotente y sin el menor interés de cumplir con su trabajo, o por lo menos escuchar a los usuarios." (spe991213.txt)
[having to spend hours at an incompetent customer service trying to clarify our disagreements with people who are rude, prepotent, and without the smallest interest in doing their work, or at least in listening to the users.] (Underline added)

"ante la indiferencia de quienes están obligados a proporcionar un buen servicio." (spl970227.txt)
[faced with the indifference of those who are obligated to provide good service.]

"Se nota que hay muy mala voluntad, ausencia total de educación y hasta despotismo al obtener 'comunicación'!" (sp990809.txt)
[When getting 'communication', it is noticeable that there is very bad will, total absence of education and even despotism.]
As was discussed in Chapter 3, research on consumer complaints (Williams, 1996) points out that when consumers complain they are seeking redress in different forms. According to Williams (1996), complainants want recognition of the legitimacy of their claims or as he defines it "to be taken seriously" (p. 21). Some examples of recognition include receiving an apology from the company; an explanation of the causes of the problem, as well as getting some assurance that the problem will be corrected in the future. It is thus significant that the consumers' claims about abuse of power and incompetence of customer service employees are related to experiences where one or more of these expectations of "cooperation" seemed to have been violated. For instance:

"Nadie toma en serio los problemas." (esp911025.txt)  
[No one takes the problems seriously]

"¡¿Y la disculpa que tendrían que ofrecerme?!" (spl991105.txt)  
[And what happened to the apology that they should have given me?!!]  
"lo cual hace pensar que el equipo de trabajo de esta gran empresa es incompetente y poco fiable." (spe991213.txt)  
[this makes me think that the working group at this great enterprise is incompetent and not very reliable].

By the same token, in those rare occasions when consumers wrote to thank Telmex and its employees for their good service, the maxims of cooperation are emphasized by consumers with surprise and gratitude. Similarly, in their letters about the new competitors consumers tended to underscore the contrast between the service attitude of the competitors and that which they had grown accustomed to with Telmex:
"que se tomó la molestia en hacer dicha llamada, con el fin de verificar que mi situación estuviese resuelta, y al mismo tiempo para ponerse a mis órdenes." (esp960704.txt)
[ she took the trouble to make a call to verify that my situation was resolved and, at the same time, she put herself at my service]

"Debo decir que antes, durante y después de ser cliente de Alestra-AT&T fui atendido con amabilidad y todas mis dudas las resolvieron en el momento. Ofrecieron hacer un seguimiento, informarme y comprobarme que efectivamente se realizaban dichas llamadas" (spa970605.txt)
[I should say that before, during and after being a client of Alestra-AT&T I was served with kindness and all my doubts were immediately resolved. They offered to me to conduct a follow up, to inform me [about the results] and to give me proof that those calls were indeed made.]

"son personas que han sabido escuchar de perdida el problema que tuve." (spl990517.txt)
[they are people that have known at least how to listen to the problem I had.]

It is important to point out that the failure to fulfill these basic assumptions evoked the strongest emotional reactions of anger and frustration on the part of consumers. This was perhaps because the violations of the principles of cooperation, as well as of assumptions of politeness and empathy occurred mostly in face to face interactions, putting consumers in situations in which the existence of power inequalities was more evident and personal than those that occurred when Telmex failed to fulfill promises made to the public in general.

In sum, lack of cooperation was an interesting theme because it underscored particular areas in the relationship between consumers and service providers where basic assumptions of communication were being violated. In their articulations of these violations, consumers implicitly indicated the values and expectations of service that they give priority to and that they use to evaluate different dimensions of performance.
Some of these values are discussed in the results section for the codification of values below. In the following section I discuss some other ways in which consumers perceived that Telmex and the new operators exercised power over consumers.

Other expressions of abuse of power

Beyond their attitudes about the non-cooperation, unfulfilled promises, and indifference of Telmex employees already discussed, consumers distinguished in their letters some other ways in which the incumbent and the new operators exercised their power over consumers. I grouped these subthemes under the title of power abuse because through them the service providers, especially Telmex, treated consumers in an "injurious, improper, or unreasonable" (American Heritage Dictionary, 1994) manner. Among these subthemes were:

Lack of control

This industry-related subtheme illustrates the different situations in which consumers complained of losing control over their decisions about telecommunication services to Telmex and its competitors. The units that were coded under the subtheme "lack of control" referred to situations in which Telmex or the other operators would have the power to determine when and how something would happen but the consumer would have no say in this decision, as well as to situations where the operators simply ignored existing regulations and took action without the consumer's approval. Issues of time, already discussed above, were typical cases in which consumers underscored Telmex's control over important decisions and where standards of service were usually ignored. The other two cases that serve as illustrations were the disconnection of lines
by Telmex while a dispute was still in litigation before Profeco and the practice of slamming that began with the entry of new long distance competitors and in which operators changed the long distance service provider selected by the consumer to a different one without the subscriber's consent. For instance, one consumer wrote:

"Lo anterior demuestra que, con todo lujo de arbitrariedad, estas compañías trafican con las decisiones de los usuarios del servicio de larga distancia" (spl980319.txt)
[This demonstrates that, arbitrarily, these companies traffic in the decisions of the long distance service users]

In a similar fashion, consumers identified unstated policies and institutionalized practices of the operators on which consumers had no possibility of negotiating alternative terms or of requesting some flexibility in their enforcement. The policies that consumers referred to most often were related to Telmex's billing and collection practices, such as the requirement to pay the full balance of bills even when some of the charges were being disputed and the related practice of refusing to conduct any investigation about incorrect billing until the bills were paid off completely:

"ya que en cualquier caso les solicitan al cliente cautivo que 'primero pague y después hacemos cualquier aclaración'." (esp950807.txt)
[In any case, they require the captive client to 'pay first and then they will make any clarification'].

"desde la privatización de Telmex, hemos constatado un empeoramiento del servicio que presta esa empresa, pero eso sí, poniéndose muy exigente con la puntualidad en el pago de los recibos." (esp920605.txt)
[since Telmex's privatization we have observed deterioration in the service provided by that company, yet it is becoming very demanding about the [users'] punctuality in paying the bills]

Other policies adopted by Telmex were the result of business strategies to fulfill the requirements of the Concession Title or were linked to tariff rebalancing, but their consequences tended to negatively affect consumers. For example:
"esta funcionaria me dijo que es política de la empresa hacer sólo instalaciones nuevas y dejar pendientes solicitudes de reparación y cambio de domicilio." (esp920121.txt) [this employee told me that it is a policy of the company to only install new facilities and to leave repair and address change reports pending.]

"quienes nos demuestran que la empresa mexicana abarató el servicio de larga distancia para desquitarse con creces en el servicio local." (spl970603.txt) [they demonstrate that the Mexican company reduced its long distance service rates to make good with profits in local service.]

It is important to point out that not all the policies implemented by Telmex were criticized by consumers. Although they were a minority, some policies actually represented improvements in the way Telmex treated some of its customers, particularly business customers:

"Nos da gusto que la nueva mentalidad en Telmex comparta los problemas de sus clientes y de una pronta solución a estos." (spl94118a.txt) [We are pleased that the new way of thinking in Telmex shares its clients' problems and gives prompt solution to them]

Yet not all business clients were treated equally well, as the following quote illustrates:

"Se sabe que las empresas mexicanas no son importantes para Teléfonos de México SA de CV" (espa931011.txt) [It is known that the Mexican companies are not important to Teléfonos de Mexico SA de CV]

It is interesting that in some of the quotes that referred to lack of control consumers reacted almost like adolescents rebelling against an overpowering parent, represented in this case by the service provider. These comments emphasized that the operators acted as if the subscribers' decisions were 'unimportant' and thus, they could simply be subdued by those of the operators. For example:

"Es indignante que Telmex siga tratándonos como si nuestra opinión no contara" (spl980728.txt) [It is revolting that Telmex continues treating us as if our opinion didn't count]
"¿Debo interpretar esto como un 'ya estás con nosotros y te callas'?" (spa970605.txt)
[Should I interpret this as 'you are already with us and you be quiet']

"Me parece que Telmex abusa nuevamente de su poder" (esp000604a.txt)
[It seems to me that Telmex is once again abusing its power]

The lack of control felt by consumers is not surprising. Hirschman (1970) asserts in this respect that the bargaining power of consumers and thus, their ability to effectuate changes in the performance of a company, depends on the degree that their consumption affects the company's total sales. Power is low for consumers in atomistic markets, he states, which is clearly exemplified in the complaints analyzed in this dissertation. These letters were sent by residential and small business customers whose individual accounts have little influence on the general finances of Telmex, and even on those of the new competitors. Complaining, or using the choice of voice, as Hirschman calls it, is costly for these consumers because, as we have already seen, it requires a lot of time to go through the complaining process, and even when doing so, their chances of success are low.

Lack of solutions

In view of the low bargaining power of residential and small business subscribers, it is not surprising that many of them claimed that their requests for service and repairs went unheard, notwithstanding all the effort and resources committed by consumers in trying to find a solution to their problems. In this sense, the subtheme of "lack of solutions" is the epitome of the consumers' dealings with Telmex. Examples of this subtheme include:
"Lo normal es que los abonados a Telmex paguemos y esperemos en silencio lo que esa empresa desee hacer con un servicio público que se le ha concesionado." (esp920121.txt)
[The usual [practice] is for subscribers to pay Telmex and wait in silence for whatever it is that that company wants to do with a public service that has been licensed to it]

"sé que de alguna manera me podrá ayudar ya que he agotado mis recursos en procurar la atención por parte de Telmex a mi clamor para el restablecimiento del suministro de servicio telefónico" (esp921029.txt)
[I know that somehow you will be able to me to help since I have exhausted my resources trying to get Telmex's attention to my claim to reestablish my phone service]

"pero no me dan una solución a mi problema." (esp961129.txt)
[but they don't give me a solution to my problem.]

**Corruption and coercion**

As stated above, consumers identified institutionalized practices of Telmex and its employees that were interpreted as expressions of abuse of power. Corruption was a practice identified not only at the level of the single employee that requested money to do his job, but also at the level of the company. For consumers, the overcharges that appeared in their billings, as well as the delays in providing adjustments and credits were considered forms of corruption at the level of the organization. For instance:

"para su empresa cobrar de mas a cada usuario significa que el total de estos cobros indebidos seguramente sume millones." (esp950828.txt)
[for your company overcharging each user means that the total of these undue collections surely adds to millions.]

"francamente la gran mayoría de estos 'señores' son corruptos, siempre solicitan la consabida 'mordida'" (sp990809.txt)
[frankly the great majority of these 'gentlemen' are corrupt; they always request the traditional 'bribe']

It is important to point out, however, that even when the practice of corruption by individuals was criticized by consumers, as an institution, consumers had come to depend on it as a means to get their problems solved when the legal ways did not work.
In this sense, the practice of corruption was for consumers a "necessary evil" due to the lack of response and solutions that prevailed in Telmex's business and repair offices. In the words of one consumer:

"Mas aún, me han quitado la oportunidad de recurrir a la "mordida", al "soborno" con tal de poder contar con teléfono." (esp931012)  
[Even more, they have taken from me the opportunity to use the "bite", [that is] to "bribe" in order to be able to have a telephone.]

While corruption was a criticized but accepted practice, coercion simply made subscribers feel vulnerable, since Telmex had control over a service that they considered necessary in their daily lives. Because of the importance of having access to telephony, consumers found themselves forced to comply with Telmex's policies even when they were considered abusive and unjust:

"al verme forzado a cubrir el adeudo exagerado, de lo contrario se me suspendería el servicio indefinidamente." (spl970227.txt)  
[I saw myself being forced to cover the exaggerated balance; otherwise they would suspend the service indefinitely.]

"Posteriormente me informaron que me cambiarían el equipo, pero con la condición de firmar un nuevo contrato" (esp000428.txt)  
[Later on they informed me that they would exchange the equipment, but under the condition of signing a new contract]

Excessive profits and rate increases

Similar to the discrepancy between promises and actions, consumers expressed their disapproval of the gap that existed between Telmex's high profit level and the level of service provided by the company. It was particularly offensive to consumers that Telmex would increase rates for local services, which made telephone service more difficult to afford for many Mexicans, while the finances of the company were expanding rapidly as stated by financial reports on the news. For consumers the fact
that the gap between profits and level of performance existed was an expression of Telmex's monopoly power and its lack of care for the population it was expected to serve.

By the same token, consumers argued that rate increases were part of the monopoly's corporate strategy to increase profits, which underscores the fact that at least those consumers that complained to the newspaper did not make a connection between rate increases in local services and the company's requirement of rebalancing rates. It is possible that the link between higher rates and profit levels mentioned in consumers' letters was due to their perception that the increases appearing in their bills were the result of incorrect charges and excessive measured service calls. Thus, the higher balances in their bills were due to Telmex's inefficiency and to the company's illegal practices that allowed it to obtain financial benefits by defrauding consumers.

Some examples of consumers' complaints about profits and rate increases are:

"Un sinnúmero de quejas han sido planteadas, como los cobros indebidos e injustificados por parte de Teléfonos de México." (esp960917a.txt)
[Innumerable complaints have been sent, such as the undue and unjustified charges on the part of Teléfonos de Mexico.]

"A este ritmo, uno de estos días aparecerá la clave "PM" (poder monopólico, a cargo de la cual el monopolio hará otros cobros a su antojo.)" (esp950807.txt)
[At this rhythm, one of these days the code 'MP' (monopoly power) will appear [on the bills], [a code] under which the monopoly will impute other charges to its whim.]

"y no atiende convenientemente las reclamaciones de sus suscriptores, no obstante que ha obtenido en pocos años ganancias millonarias en dólares." (esp950628.txt)
[and it doesn't attend to its subscribers' complaints, notwithstanding that [Telmex] has obtained millions of dollars in earnings in a few years]
In view of the multiple policies and actions on the part of Telmex that affected consumers during the years that the company operated as a private monopoly it is understandable that consumers would feel powerless before the monopoly and that they would see no real solution to their problems but the possibility of exit that would be brought about by competition. As stated in the section of choice above, consumers emphasized in their letters the need to have a choice of suppliers for the different telecommunication markets in Mexico. Once competition in the long distance service began in 1997, some consumers did exercise their ability to exit Telmex and did so happily, waiting for competition in local service to be a reality, so that they could leave Telmex completely, as illustrated in the following quotes:

"Es increíble la cantidad de abusos que comete esta empresa en contra de todos los que lamentablemente tenemos que hacer uso de sus servicios, ya que no tenemos otra alternativa. . . . Estoy a la espera de que otras empresas de telefonía[local] tengan la posibilidad de ofrecernos este servicio para poder decirle adiós para siempre a otra inmensa pero lamentable empresa mexicana." (spe971205.txt)
[It is incredible the amount of abuses that this company perpetrates against all those that regrettably have to make use of its services because we don't have another alternative. . . . I am waiting for other [local] telephone companies to have the possibility of supplying this service so as to be able to say good-bye forever to another immense but lamentable Mexican company.]

"Firmé cerca de cien hojas de selección dos veces para poder quedar con ustedes." (spe980518.txt)
[I signed about a hundred pages [of the application to change providers] twice to be able to be with you]

"Espero el momento en que se abra la telefonía local para despedirme de usted como se merece." (spe981208)
[I am waiting for the moment when local telephony opens up to [competition to] say goodbye to you the way you deserve]

In sum, the expressions of power inequality between Telmex and the consumers in Mexico were manifold, from the provision of inefficient service to employees that were abusive to customers; from excessive profits to broken promises; from coercive
practices to unexplained rate increases. All these factors, conjoined with the lack of results of exercising voice, made consumers feel powerless before a monopoly that held almost absolute control over a basic and necessary service. They also emphasized the importance of choice and the possibility of exit as tools for consumers to exercise some power over service providers.12 But perhaps the most interesting findings of this section from a communication perspective were the clues that consumers gave regarding violations of basic communication principles, such as cooperation and the effect that these violations had on the consumers’ attitudes towards Telmex, particularly mistrust and strong emotions of frustration and anger. In the following section I discuss some of the trends in the relationship between Telmex and the new competitors and how they affected consumers as a consequence.

Section 2. Expressions of power inequality: The relationship between Telmex and its competitors

In the section above I discussed the policies and actions through which Telmex exercised power over consumers. In this section I present the most important findings with respect to the relationship that exists, according to consumers, between Telmex and its new competitors. Three subthemes related to competition emerged from the letters, as illustrated in Figure 6.18: barriers to competition, consequences of competition and Telmex's reactions to competition. Consumers perceived competition as a solution to the problems with Telmex because it would provide them the option of
exiting Telmex to obtain services from the new providers. In this sense, any activity on the part of Telmex that could be perceived as a barrier to entry or an obstacle to competition was criticized in the letters.

As is discussed below, consumers claimed that the close relationship between Telmex and the Mexican government allowed the incumbent to engage in anticompetitive practices that could affect the new competitors and, consequently, consumers. Many of these complaints had to do with the increases in local telephony charges that began occurring after the beginning of competition in the long distance market. As was discussed in Chapter 5, these increases occurred once the rate freeze mandated by the government during the crisis period was lifted and the rate rebalancing process resumed in 1996. Yet the fact that both events occurred simultaneously facilitated the making of a connection by consumers between changing providers and increases in measured service charges. For example:

"Tal vez el haber decidido a contratar el servicio de larga distancia con una compañía telefónica seria y profesional, sea la razón de que Telmex se desquite y ocasione estos problemas." (spe970609.txt)
Perhaps having decided to get long distance service from a serious and professional phone company, is reason [enough] for Telmex to get even and cause these problems.]

"A partir de que se realizó el cambio de compañía de larga distancia, resultó que el incremento en el servicio medido fue exagerado" (spl980126.txt)
[There was an exaggerated increase in measured service [charges] from the moment the change in long distance service provider took place]

"pero, peor aún, ante estas prácticas perversas, la competencia desleal en larga distancia podría obligar a compañías como Avantel y Alestra a salir del mercado" (spl980728.txt)
[but, even worse, faced with these perverse practices, illegal competition in long distance could force companies such as Avantel and Alestra to leave the market]
Taking into account the mistrusting relationship that existed between Telmex and its subscribers previous to competition, it is not surprising that consumers would interpret such increases as a form of punishment for those local subscribers who exited Telmex's long distance service, as well as a way to hamper competition. In defense of the consumers' perspective, it should be noted that even while rate rebalancing can explain some of the changes perceived by consumers in their measured service charges, some of the increments were the result of unjustified increases in the number of local calls tallied by Telmex and not just of rate increases. One could say that Telmex's inefficiency in billing could only further convince consumers to go to the competition. However, Telmex’s stronghold over the local telephony market and the tendency of residential consumers to use local telephony more often than long distance service make it understandable that some consumers actually felt coerced to go back to Telmex as their long distance provider.

Another barrier to competition identified by consumers was slamming, which was carried out not only by Telmex but also by Avantel and Alestra, the two strongest long distance competitors. Besides Telmex's reactions to competition, the entry of new providers brought about changes that impacted consumers both positively and negatively. One of the positive consequences was that consumers would finally have the alternative of using exit as an expression of their opinion of Telmex's performance:

"y esto ocasionará que Telmex pierda un alto porcentaje de clientes y por consiguiente de dinero." (spe971027.txt)

[and this will cause Telmex to lose a high percentage of its clients and, consequently, of money.]
By the same token, competition would be an incentive for Telmex to improve performance, reduce rates, and finally fulfill the promises made after its privatization:

"si Telmex quiere competir sí puede ampliar su red a todos los rincones del país" (esp961129b.txt)
[if Telmex wants to compete it can actually extend its network to all the corners of the country]

"La competencia en la prestación del servicio telefónico de larga distancia ha permitido reducciones en las tarifas al público de hasta 50 por ciento, en términos reales." (esp000129.txt)
[Competition in long distance telephone service has allowed rate reductions to the public of up to 50 percent in real terms.]

Although consumers complained about some of the consequences of more service providers, such as the inconveniences caused by digging to install the new competitor's networks and telemarketing calls offering calling plans, in general, competition was a welcome change for consumers.

In sum, the industry-related themes provided a depiction of Telmex as a powerful and inefficient company whose policies and actions had the effect of making consumers feel powerless and unable to find a solution to their communication problems. Even when the competitors sometimes engaged in practices similar to those of Telmex, the general concept that consumers had of them was positive because they represented an alternative to Telmex. In the following section I discuss the themes related to consumers as actors and describe some of the reactions that the feeling of powerlessness provoked in consumers.
Consumers: Themes and trends

Through the expression of emotions, of their frustration for unfulfilled promises, and the narration of a seemingly never-ending chain of problems and abuses, consumers depict in their letters the abusive context in which they are forced to interact with Telmex. These depictions bring us step by step to the bottom of the problem, to the cornerstone upon which consumers build their argumentative edifice: the intrinsic relationship of the powerful and the powerless, of the victimizer and its victims. Consumers define themselves as victims. As such, they see themselves trapped in an unresponsive and inefficient system composed of not only Telmex but also, and perhaps more importantly, of the government entities assumed to be responsible for protecting the public from such abuses.

Of the five themes related to consumers illustrated in Figure 6.17, action, evidence, definition of self and others, emotions, and importance of telecommunications, I consider that the first three themes provide the most valuable information for understanding the consumers' argument about the public interest. While the industry-related themes provided information about expectations and failures regarding Telmex's performance and its relations with consumers, consumer-related themes shed light on the factors that assist or hinder consumers' actions and expressions of voice, and thus on the factors that empower or disempower consumers before Telmex and the other providers.

Figure 6.19 illustrates the researcher's interpretation of the relations that consumers established among the different consumer-related themes. This figure can be considered a continuation of Figure 6.18 on industry-related themes. At the bottom of
Figure 6.18 consumers found themselves powerless as a result of Telmex's policies and actions. Figure 6.19 at the top begins with this sense of powerlessness as one of the characteristics of consumers that in conjunction with their emotions of frustration and anger influenced their definition of self as victims. Yet, even when consumers see themselves as victims, they are not passive. Their emotions, as well as the importance of telecommunication services in the consumers' everyday life, impel them to take action and to interact with the other three actors, either through voice, exit, or loyalty.
The success or failure of these actions depended in part on the type of evidence consumers had access to. Lacking "acceptable" evidence to present before the service providers tended to reduce significantly their chance of getting solutions. By the same token, consumers improved their opportunities of success when they had access to evidence that providers would consider "acceptable."

The most recurrent definition that consumers provided of Telmex, the government and the new competitors, represented in orange boxes in Figure 6.19, indicated factors that affected, either positively or negatively, the consumers' perception of themselves as victims, thus closing the cycle. It is important to point out that this cycle is not an unchangeable loop, but a spiral in which consumers learn from their previous experiences and consequently modify the type of actions taken in the interactions that follow. The spiral of interaction was also affected by the entry of new competitors into the telecom market as it modified the alternatives available to consumers, as discussed above, and thus, their relationship with Telmex.

To complement the information summarized in Figure 6.19, in the following subsections I describe the most significant trends of each of the consumer-related themes.

Consumers' definitions, importance of telecommunications, and emotions

The relation among industry-related themes, depicted in Figure 6.18, started with the assumption that Telmex had power over consumers and exercised this power through several policies and actions. But, where did this power stem from? In their
definition of Telmex, consumers pointed out three factors that gave Telmex such power: its monopoly status, its close relation with the government, and its control over a basic service that consumers considered indispensable.

Even when the government began its separation from Telmex in terms of ownership and administration after its privatization in December of 1990, from the consumers' perspective the link between these two entities remained as close as ever after the privatization. Many factors contributed to this perception. Most prevalent among them was the fact that the government allowed Telmex to maintain its monopoly status for six years after its privatization, as indicated by the consumers' emphasis on defining Telmex as a monopoly. For consumers the term 'monopoly' summarized all the deficiencies of Telmex's performance, such as its inefficiency, its corruption, and the incompetence of its employees. Changing ownership from the state to a Mexican conglomerate made no perceivable difference in performance from the consumers' point of view because the incumbent retained its monopoly status and thus, its power over them.

"pero viendo los hechos tal parece que estos concesionarios se creen los dueños absolutos de los servicios públicos" (esp920702.txt)
[but considering the facts, it seems that these concessionaires believe they are the absolute owners of the public services]

"Por este medio quiero que los dueños de Telmex se enteren que su servicio es desastroso; claro, porque se trata de un monopolio." (esp931020.txt)
[Through this means I want to let Telmex's owners know that their service is disastrous; of course, because it is a monopoly.]

"Todo esto demuestra que Telmex sigue siendo la misma compañía inefficiente e incompetente" (spe970609.txt)
[All this demonstrates that Telmex continues being the same inefficient and incompetent company]
In fact, based on their comments about Telmex's focus on profitability, the change to a private monopoly added insult to injury because it did not result in improved performance as it was expected to, but it did allow Telmex and Carlos Slim to make the company even more profitable at the expense of consumers:

"la nueva clase empresarial mexicana sigue siendo tan rentista "nopalera" y usufructuaria de las concesiones, como lo fueron los "Legorreta" y todos aquellos empresarios que se enriquecieron al amparo de la protección del mercado" (esp931012.txt)
[the new Mexican managerial class continues being as low class, [focused on obtaining] rents and usufruct from licenses as the "Legorreta" were and all those managers that got rich while being protected from the market]

"Puede ser que la privatización de Telmex sea un gran éxito para gente rica que invierte en la bolsa, pero para los usuarios el servicio sigue siendo ineficiente. Una compañía tal quebraría en países con competencia verdadera" (esp930402.txt)
[It may be that Telmex's privatization has been a great success for the rich people that invest in the stock exchange, but for the users the service is still inefficient. That kind of company would be bankrupted in countries with true competition]

Another factor that contributed to the consumers' perception that Telmex and the government were still close was Telmex's impunity and lack of accountability, even when its performance was not on a par with some of the Concession's requirements and, perhaps more importantly, with the expectations of improvement created at the time of its privatization.14

"a pesar de las promesas de prestar un mejor servicio hechas por esa empresa en el momento de su privatización; sin embargo, todo ha quedado en eso, en promesas." (esp930607.txt)
[in spite of the promises of providing better service, made by that company at the time of its privatization, . . . nevertheless, everything has remained that, just promises.]

The nature of Telmex's relationship with the government seemed to exacerbate the imbalance that already existed between consumers and the incumbent:

"también entiendo que monopolios como lo son estas compañía puedan errar sin mayor preocupación" (spl970303.txt)
[I also understand that monopolies such as these companies can err without any worries]
"Que sepamos, en ningún país del mundo existe empresa que cobre lo que se le antoje sin que nadie pueda checarlo." (spl980729.txt)
[As far as we know, there is not a company in any country of the world that can charge [consumers] what it fancies without having anybody that can check upon it.]

"Desde mi condición ciudadana he recibido de nueva cuenta la afrenta por parte de los que tanto reclamaron la ineptitud estatal para proveer de los servicios más elementales a la comunidad" (esp931012.txt)
[As a citizen, I was affronted once again by those who so fiercely complained about the State's ineptitude to provide the most elementary services to the community]

In Chapter 4 it was discussed that in general, the relationship between the Ministry of Communication and Telmex remained amicable after the privatization and that only a few sanctions were imposed on Telmex for its failure to comply with quality of service standards. Consumers seemed to have picked up on this amicable relation; so much so that from their perspective, the government had not only failed to restrain Telmex from being inefficient and abusive, but even protected it from what they considered to be the solution to those problems, that is, from competition:

"y a veces me llega la duda: ¿No estará el gobierno de acuerdo con ellos?" (esp920702.txt)
[and sometimes I wonder: could the government be in cahoots with them?]

"La ausencia de... competencia y el protecciónismo del régimen hacia Telmex son evidentes." (esp930402.txt)
[The absence of... competition and the protectionism of Telmex by the regime are evident.]

"a la cual le ha permitido por cinco años una posición de monopolio que va contra las leyes" (spl980729.txt)
[it has granted [Telmex] a monopoly status for five years, which goes against the law]

In this sense, consumers considered that the government, by siding with Telmex, had betrayed them because it had neglected its role of trustee of the public interest:

"Teléfonos de México nos cobra lo que se le da la gana, con la complacencia del mismo gobierno" (esp951202.txt)
[Teléfonos de Mexico charges us whatever it wants with the consent of the government itself]
Most of the consumers' comments regarding the government's alliance with Telmex referred to the government in general, but some letters did refer to specific cases of government bias in favor of Telmex, particularly when consumers complained to the consumer protection agency, Profeco. Even when their appeals to Profeco sometimes obtained positive results, consumers who wrote about this topic either implied or clearly expressed that there was some complicity between Telmex and the government. Once again, an entity entrusted with protecting consumers from the abuses of private companies was considered to have failed meeting its duties in a fair and unbiased way:

"el veredicto de la Profeco fue descaradamente a favor de Telmex no obstante que sus funciones son las de defender al consumidor." (esp940506.txt)

[Profeco's verdict was shamelessly in favor of Telmex even when its duties are to defend the consumer.]

Besides its monopoly status and its closeness to the government, the third factor that gave Telmex power over consumers was the importance that telecommunication services had for consumers. Ironically, the importance of telecommunications not only empowered Telmex, but also consumers, as it provided sufficient motivation for some of them to take action and try to find a solution to their problems with Telmex. Thus, even when "importance of telecommunications" received the least attention from consumers among all the themes, with only one percent of the total units of analysis in
27 letters, its value for this dissertation was in terms of content, as it pointed out the factors that made telephony valuable in consumers' lives. For business subscribers, having access to telephone service was considered an indispensable business tool to contact and be contacted by clients. Not having access to telephone service affects them financially and also has negative effects on the business’ image and reputation:

"nos gusta dar un buen servicio a nuestros clientes, pero cuando no tenemos teléfono simplemente no podemos hacerlo." (esp930420.txt)
[we like providing our clients with good service, but when we don't have telephone [service] we simply cannot do it.]

"Mucho agradeceré su atención a la presente ya que de eso depende mi modo de vida." (esp930820.txt)
[I would appreciate your attention to this letter because my livelihood depends on it]

Residential consumers, on the other hand, considered telephone service a necessary means to maintain contact with their families as well as for safety:

"siendo el teléfono un servicio de primera necesidad" (esp930420.txt)
[telephony being a service of basic necessity]

"Señor director, mi teléfono no es un lujo, es una necesidad" (esp930817.txt)
[Director, my telephone is not a luxury, it is a necessity]

"Con niños en la familia su teléfono es indispensable." (esp950614.txt)
[Having children in the family her telephone is indispensable.]

Taking into account all the factors that allowed Telmex to exercise power over its subscribers, it is not surprising that consumers defined themselves as victims, when in their view the profitable, abusive, and inefficient monopoly of Telmex had control over a resource they considered indispensable and when the authorities that were supposed to oversee Telmex and protect consumers seemed to do neither. Some examples of the consumers' definition of self as victims are:
"[Telmex] tiene al pueblo cautivo." (spl980729.txt)
[Telmex] has the people captive

"y los usuarios estamos a merced de la eficiencia y honestidad de Telmex." (spl980929.txt)
[and the users are at the mercy of the efficiency and honesty of Telmex.]

"el pueblo paga los platos rotos de la crisis y el sostenimiento de la globalización." (spe991015.txt)
[the people carry the can for the crisis and for the maintenance of globalization.]

"Como consumidor, me sentí indefenso y en desventaja con las políticas de consumo de grandes compañías como 'Tu amigo de Telcel'" (Esp000511a.txt)
[As a consumer, I felt defenseless and at a disadvantage with the consumption policies of big companies such as 'Your friend' of Telcel]

Finally, with respect to emotions, Day, Grabicke, Shaetzle and Staubach (1981) point out that some of the benefits of complaining include psychological factors, such as venting emotions of frustration and anger, and "asserting one's rights as a consumer" (p.95). Day et al. also found out that the higher the level of uncertainty of consumers regarding the chances of solving their problem and the balance between costs and benefits, the higher the tendency of psychological factors, such as emotions and rights, to influence the decision to take action (p.96). This seems to be the case in many of the letters analyzed, where consumers expressed high levels of frustration and anger, particularly as the failure to obtain solutions to their problems forced them into more time-consuming and intricate complaint processes. Different expressions of emotion, ranging from anger to sadness, from gratefulness to sarcasm were present in the 66 letters that had references to emotions (3% of the total units of analysis). Some examples include:

"le reitero mi franco asombro por el crecimiento de Teléfonos de México" (esp920922.txt)
[I reiterate my frank astonishment at the growth of Telephones of Mexico]

"como mexicana me da tristeza que para resolver los problemas de las líneas telefónicas o de cualquier otra índole, sea necesario [escribirle]." (esp930823.txt)
[as a Mexican it saddens me that it is necessary [to write you] in order to solve problems with the phone lines or problems of any other nature]

"Expresamos nuestro total rechazo e indignación por el abusivo aumento de las rentas mensuales por parte de Teléfonos de México" (spl970603.txt)
[We express our total rejection and indignation at the abusive increase by Teléfonos de Mexico in the monthly rent]

"Consiero injusto este tipo de acciones en contra de clientes" (spe971027.txt)
[I consider these kinds of actions against clients to be unjust]

In sum, the mistrusting relation between consumers and Telmex was magnified by the consumers’ perception of betrayal on the part of the government entities in charge of overseeing Telmex and furthering the public interest. For consumers, privatization did not alter the close relation that existed between the government and the incumbent; this relationship, together with the monopoly status granted to Telmex and Telmex's control over telecommunication services, helped to provide the incumbent operator power over consumers. As a result, consumers perceived themselves as victims and emotions of anger and frustration flourished. Nevertheless, the sense of victimization did not mean that consumers became completely powerless. With the "official" protectors considered to be on the side of the victimizer, some of the victims used the resources at hand in their search for justice and control, as discussed below.

**Consumer actions**

An important component of the consumers’ letters was the numerous accounts of the actions consumers had taken in their effort to solve their problems. These accounts indicated that even when consumers defined themselves as victims, they were not submissive, but in fact they engaged in different types of actions as a reaction to
Telmex's and the other service providers' performance. At an initial level, these actions included calling Telmex's repair number (05) to report a problem and visiting the business offices of the different service providers. As we have seen, many of these actions resulted in long waiting periods, lack of cooperation, abuses, and broken promises that forced some consumers to step up and present their grievances to Profeco and the SCT. Finally, when the appeals to the authorities failed, consumers 'went public' with their problem and used the media, such as the newspaper column this dissertation is using as a source, to pressure service providers into solving the problem.

For instance, in its letter to the editor of Space of the Reader a consumer wrote:

"y [mi queja] ha sido reportada en múltiples ocasiones al 05, por escrito a la sucursal de la zona, a las oficinas generales y también a la Procuraduría Federal del Consumidor. Son ustedes, pues, el último recurso por utilizar, espero que el más eficiente." (esp920313.txt)

[and [my complaint] has been reported on multiple occasions to 05, in writing to the business office branch of the area, to [Telmex's] general offices and also to Profeco. You are, then, the last resource to be used and I hope the most efficient]

Another consumer stressed the difficulty that going through the complaint process represented to consumers when saying:

"inicié mi peregrinaje para ser escuchada y en el mejor de los casos me hagan justicia." (spl980930.txt)

[I began my pilgrimage to be listened to and, in the best scenario, to get justice]

However, not all consumers followed all the intermediate steps before appealing their cases through the press. Some of them skipped complaining before Profeco perhaps as a result of the disillusionment of consumers with the bureaucratic processes within this entity and for its siding with Telmex on some occasions:

"Hay instancias oficiales para presentar estas quejas, pero si los mexicanos nos manejáramos con ese criterio, las horas que nos tomaría ello serían más costosas que pagar el abuso cometido por instituciones públicas y particulares" (esp950828.txt)
There are official institutions to present these complaints to, but if we Mexicans conducted ourselves using that approach, the hours that this would take us would be more expensive to us than paying for the abuse of public and private institutions.

Other consumers went beyond the official process and took independent steps to solve their problems, ranging from requesting help directly from the telephone provider's repairmen with the accompanying bribe to writing to several newspapers at the same time, from appealing to authorities in the Senate to conducting their own research, tallying or controlling their calls. Perhaps the most extreme act of independence was rebellion, which occurred when consumers simply refused to keep following Telmex's rules—such as paying for disputed charges—until their problems were attended to:

"y no voy a pagar los recibos que me llegaron y los que me sigan enviando" (spl970818.txt)
[and I won't pay the bill I have received and those that they keep sending me]

As was discussed already, however, the threat of disconnection coerced some of them back into complying. For example:

"porque mucha gente se cansa y prefiere pagar a seguir un proceso en la Profeco" (spl980914)
[Many people get tired and prefer to pay instead of submitting a complaint before Profeco]

In sum, the complaining processes followed by consumers in Mexico coincided with the literature findings presented in Chapter 3. Moyer (1984), for instance, points out that as the frequency of complaining goes up, the chances increase that the matter will be brought to a manufacturer, Better Business Bureau, TV station, or radio station. . . . [A] dissatisfied buyer's first recourse is to the seller himself, with manufacturers and third parties brought in if early resolution proves difficult. (p. 78)
One unexpected finding was that a few of the consumers actually reflected on the fact that only a few of them had the courage or interest, as well as the necessary resources (time, mobility, and money) to use voice, that is, to complain before service providers and Profeco:

"En muchas ocasiones las personas prefieren quedarse calladas, ya que es un monopolio" (spe991213)  
[Many times people prefer to remain quiet, since it is a monopoly]

"pudieran tener muchos casos similares al mío que la gente por impotencia o abandono no reclama" (spl980929.txt)  
[they could have many similar cases to mine which people don't complain about because of impotence or abandonment]

"No es equitativo el costo del servicio de Telmex: costo de servicio, impuestos, quejas, tiempo perdido en las oficinas, tiempo en la Profeco, audiencias, gastos varios." (spl94121.txt)  
[The cost of Telmex's service is not equitable: cost of service, taxes, complaints, time lost at the offices, time at Profeco, audiences, other expenses…]

"No todos los ciudadanos encontramos medios de información para protestar correspondientemente" (spl990612.txt)  
[Not all of us citizens encounter communication media to protest correspondingly]

As a result of this self-selecting process, those consumers that complained became unofficial leaders or representatives of a greater group of non-action or silent consumers that were going through similar situations. In this sense, these consumers embodied what Grikscheit and Granzin (1975) defined as "activists", that is, a person who "actively utilizes all channels of complaining, not only to seek individual redress but for social good [italics added]" (Cited in Singh, 1990, p. 81).

For instance, those consumers that used the newspaper column to complain about their problems with telephone service providers, considered it their "last resort", and in this sense demonstrated a sense of victimization and lack of power. Yet the
publication of consumer complaints in the newspaper seemed to empower consumers not only by allowing them to publicly vent grievances with the providers, but also because the publication forced the providers to try to "save face". By doing so, the complaints moved the grievance from the individual and close sphere of a "personal problem" to a public sphere, where a particular complaint became one of many, that is, a common problem, a social problem. In fact, many consumers began their letters by recognizing that their own problem was representative of a more extensive one by using expressions such as: "This is one of the many complaints…", "all the other persons at the business office"; "like many other hundreds of customers…". Some examples were:

"exponiendo un problema que desgraciadamente se ha extendido hacia muchos de los usuarios del servicio de la empresa Teléfonos de México" (esp911206.txt)  
[exposing a problem that unfortunately has extended toward many of the users of the service provided] by the company Teléfonos de Mexico]

"Agradecemos se sirva publicar esta carta apoyando el interés de muchos usuarios de Teléfonos de México, SA de CV, que están en iguales o peores condiciones que nosotros." (esp920605.txt)  
[We appreciate your publishing this letter in support of the interest of many subscribers of Teléfonos de Mexico who are in similar or worse conditions than us.]

"Estamos seguros que miles de usuarios se cuestionan lo mismo." (spl970603.txt)  
[We are sure that thousands of users are asking the same thing.]

Argumentatively, using this idea of being one of many also gave the particular complaint of the consumer more weight before its audience, which should be considered to be not only Telmex and the other providers, but also other telephone users and the newspaper editor. As a representative of a bigger problem the particular letter
increased its chances of being published and of obtaining a response from the providers. This, however, should not be held against the particular consumer because in a sense they were actually acting as representative of many silent consumers.

Finally, the entry of competition provided consumers another form besides voice to express agency. Once a choice of suppliers was available, exit–changing providers or even threatening to do so–became another tool to express discontent about Telmex's performance. The threat of exiting was a tool at hand even for those who remained loyal to Telmex and did not change providers:

"A pesar de que muchos de nosotros elegimos para larga distancia a Telmex, estamos convenciéndonos de la publicidad de AT&T y otras compañías" (spl970603.txt) [Even when many of us chose Telmex as our long distance service provider, we are becoming convinced by the advertisements of AT&T and other companies]

"además de ver qué es lo que sucede primero, si me dan mi línea telefónica este año con Telmex o espero a que se inicie la apertura de la telefónica local con otras compañías." (spl970609.txt) [Let's see what happens first, if Telmex gives me my phone line this year or I wait for the opening of local telephony [competition] to begin with other companies.]

"Quiero recordarle que Alestra viene en camino" (esp960314.txt) [I want to remind you that Alestra is coming]

In sum, consumers used different types of actions to express their opinions about performance and to try to solve their problems. Just as Hirschman proposed, voice, exit, and loyalty were the responses used by consumers to demonstrate agency before the government, Telmex and the new competitors. The success of such agency depended in part on the evidence available to consumers, as is discussed below.
Consumer evidence

This theme was interesting because it was in many cases the factor that would make or break a consumer's opportunity to solve a problem. Having "hard" evidence of a mistake made by the provider, such as a payment receipt in the case of disconnection for lack of payment, usually provided consumers a better footing in defending their position. Yet this hard evidence was not available in many other cases, leaving consumers in the predicament of having to create their own evidence. Curiously, the trend in consumer evidence tended to be more towards actions taken by consumers than to physical evidence. So, for instance, consumers tried to explain high or incorrect charges based on the number of calls they usually made, the number of members in the household, or even the absence of household members at a particular point in time, among others:

"tengo un control diario de las llamadas que se hacen desde mi número telefónico" (spl970806.txt)
[I have daily control of the calls that are made from my phone number]

"Las atenuantes que pongo como indicadores es la inexistencia de extensiones, uso moderado y poca permanencia en el domicilio de quienes tenemos acceso al servicio." (spl970227.txt)
[The extenuating reasons that I propose as indicators are the nonexistence of telephone extensions, the moderate use [of the service] and the short stays at home of those who have access to the service.]

"La prueba es que he realizado llamadas a Francia, Holanda, Brampton, además de otras a la provincia mexicana, y las he pagado sin ningún reclamo" (espa930805.txt)
[The proof is that I have made calls to France, Holland, Brampton, besides others to other Mexican states, and I have paid them without any protest]

Although these were reasonable explanations, they did not actually provide consumers any hard evidence that could be taken into account when disputing the charge before Telmex or any of the competitors. Since lack of evidence disempowered
consumers before the providers and having hard evidence empowered them, it is not surprising that some consumers actually requested some form of meter so that they would be able to know and have control over the number of calls made from a telephone number:

"porque nosotros los usuarios no tenemos en nuestras casas u oficinas ningún aparato de medición que nos dé la posibilidad de ver y comprobar las llamadas o el tiempo de uso de nuestro teléfono, como son los casos del servicio publico de agua y luz" (esp920702.txt) [because we, the users, don't have in our houses or offices any meter that would give us the possibility to oversee and check the calls or the time of usage of our telephone, as is the case with the water and power services]

It seems that the high number of complaints about measured service has prompted an action on the part of Cofetel and the Communications Ministry, who are now looking into developing a meter similar to those used to measure water and power usage, as discussed in Chapter 5.

In sum, the consumer-related themes pointed to some of the factors that contributed to making consumers feel as victims of Telmex and other providers, as well as to those factors that provoked consumer action in the form of voice, exit or loyalty. The access to evidence with which to confront the service providers was particularly emphasized by consumers as a form of empowerment in their relation with the service providers. The description of consumer actions before Profeco, as well as the relationship between Telmex and the government discussed in this section, were the most significant references that consumers made to their relationship with the government. Yet there were other areas in which the government's actions affected consumers, either directly or indirectly. These themes are discussed in the following section.
The Government: Themes and trends

The perspective of consumers regarding the government centered mostly on their definition of the government as an actor, which was discussed above. However, other aspects of the regulatory activity of the government were captured under the theme of rulemaking. Among them were references to the objectives and achievements of regulatory actions related to the institutional reform of the telecommunications sector in Mexico, such as the privatization of Telmex; references to the manner in which consumers expected the rulemaking process to take place (transparency, efficiency, responsibility); as well as actions taken by the Mexican telecommunications regulatory commission, Cofetel, and/or the Consumer Protection Agency to regulate the behavior of the industry and protect consumers.

One unexpected subtheme that appeared in the letters was references that consumers made about rights they thought they should have to improve their relationship with the service providers. Since some of these proposals require the intervention of the government as a rule maker, they were also incorporated under the theme of rulemaking.

Figure 6.20 illustrates the relations that consumers perceived among the different subthemes that referred to the government. In general, consumers perceived the government as taking actions and implementing rules that affected the performance of Telmex and of the new competitors, and thus that indirectly impacted consumers. Understandably, the privatization of Telmex was at the forefront of these activities. Other actions taken by the government affected consumers directly, such as
Profeco's decisions regarding disputes between the service providers and the consumers. Finally, in view of the impact that those rules and actions have had on consumers, they pointed out some rights that they assume consumers should have as part of the basic rules for their relationship with Telmex and the new competitors. As the assumed trustee of the public interest, consumers requested the government's intervention and oversight to ensure that such rights were taken into account.
As stated in Chapter 4, I expected that consumers would adopt in their letters some of the discourse regarding the benefits of privatization and institutional reform that the President of Mexico and authorities from the Secretariat of Communications had used at the time of Telmex's privatization. Adopting the language of privatization was, in my opinion, a way to demonstrate that consumers had internalized such objectives and transformed them into expectations. This hypothesis was confirmed. In their letters, some consumers emphasized the objectives of the privatization and of NAFTA, particularly those that referred to expected improvements in the quality of service of Telmex. For instance:

"Con el propósito de estimular la competencia y la modernización de la telefonía básica en nuestro país, el gobierno de la República promovió la participación de la iniciativa privada y, posteriormente, su apertura al capital extranjero, en el marco del Tratado de Libre Comercio de América del Norte (TLCAN)." (esp000129.txt)
[With the purpose of stimulating competition and the modernization of basic telephony in our country, the government promoted the participation of private investors and, later on, its opening to foreign capital, in the framework of the North American Free Trade Agreement (NAFTA).]

"Ojalá que con la firma del tratado de libre comercio tengamos nuevas opciones" (esp920702.txt)
[Hopefully with the signature of the free trade agreement we might have new options]

However, in most cases, the references to the objectives of privatization were used as a point of comparison to the post-privatization reality, which didn't match up very well with the expectations created in 1990. In this sense, the comparison of objectives to achievements followed the same pattern as that of Telmex's unfulfilled promises:

"Los usuarios de Teléfonos de México pensamos que al privatizarse la empresa mejorararía el servicio, pero parece que nos equivocamos, ya que se volvió más deficiente, aunque esto pareciera imposible." (esp911119.txt)
[The users of Teléfonos de Mexico thought that with privatization the company would improve its service, but it seems that we made a mistake, since it became more deficient, even when this seemed impossible.]

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"Debo confesar que hasta hace meses compartí con el presidente de México las ventajas de la privatización, su efecto; tener un Estado no propietario daba oportunidad de prescindir paulatinamente de una monstruosa burocracia . . . Creo, señor presidente, que de nueva cuenta nos equivocamos" (esp931012.txt)

[I should admit that until a few months ago I agreed with the President of Mexico on the advantages of the privatization, and its effect; having a non proprietor State provided the opportunity to gradually do without a monstrous bureaucracy. . . I believe, Mister President that we made a mistake once again]

"Es lamentable que siendo el teléfono un servicio de primera necesidad, Telmex no tenga respuesta–en épocas de modernidad y privatización–mejor de cuando era una empresa paraestatal." (esp930420.txt)

[It is lamentable that telephony being a service of basic necessity, Telmex doesn't have a better answer –in times of modernity and privatization–than when it was a state company]

But in this case, it was the government who had failed to bring about the expected benefits of privatization because of its relationship with Telmex:

"¿Por qué la Secretaría de Comunicaciones y Transportes renovó la concesión?" (esp911025.txt)

[Why did the Secretariat of Communications and Transport renew the concession?]

Thus, it was understandable that consumers called for the government to enforce the existing rules and fulfill its role of overseer of the sector to the benefit of consumers:

"solicito que la autoridad competente tome cartas en el asunto, protegiendo los intereses de los usuarios." (spl980319.txt)

[I request from the authority in charge to get involved in this matter, protecting the interests of the users.]

"Por todo lo anterior suplico a Profeco, Cofetel, Secofi y a toda instancia a quien corresponda, se sirvan tomar cartas en este penoso asunto y solucionar lo conforme a derecho." (spe991024.txt)

[For all these reasons I beg Profeco, Cofetel, Secofi and all the corresponding authorities to get involved in this painful matter and to solve it according to the law.]

"Porque hasta la fecha no he visto con hechos que el gobierno actúe como le corresponde" (esp920702.txt)

[Since so far I have not seen [any actions to back] with facts that the government is acting as it should]
Part of the body of law to be enforced was what the members of the public believed to be their rights as subscribers to telecommunication services, such as the right to have a clear contract indicating the terms and limitations of their relationship with the service providers. Some petitions were as simple as receiving the service that consumers had paid for, while others would require more complex changes in the institutional framework of the sector. An example of the latter was the proposal for greater consumer participation in the rulemaking process itself, particularly on decisions that have a strong impact on the consumers' access to the service, such as setting rates. These petitions underscore the consumers' frustration due to the lack of control over the provision of this necessary service and to what they perceived as the failure of the government and of Telmex to improve performance after the reform. Some examples of consumer rights included:

"¿Por que no contamos los usuarios con un contrato donde se señale claramente nuestros derechos y obligaciones respecto a la empresa?" (esp950627.txt)
[Why don't users have a contract where our rights and obligations regarding the company are clearly stated?]

"la urgente necesidad de ingerencia de la ciudadanía en la fijación de tarifas telefónicas" (spl970221.txt)
[[There is an] urgent need for the citizenry to participate in setting phone rates]

"para ejercer mi derecho de que se me atienda, se me visite en mi domicilio y se reparen las causas técnicas que me han impedido comunicarme con el exterior" (esp911018.txt)
[to exercise my right to be attended to, to be served at my home and to have them fix the technical problems that have prevented my being able to communicate with the outside]

It is important to point out that, to date, there is not a bill of consumer rights in Mexico. "Guaranteeing consumer rights to access, quality, information, competitive prices, and choice in the provision of telecommunications services" was one of the ten
principles that guided the revision of the *Telecommunications Law* in Mexico. However, the draft of the revisions did not include a provision for the development of a bill of rights and, according to one of the senators involved in the revisions it was not even considered (E. Rubio, personal communication, March 8, 2002).

In sum, the analysis of the themes that emerged from the codification of consumer letters shed light on the very complex relationship that exists among the different actors participating in the telecommunications sector. This relationship is characterized by a sense of mistrust and victimization on the part of consumers that stemmed from the exercise of abusive power of Telmex as a monopoly and of what consumers perceived as the overprotection of Telmex by the government, to the detriment of consumers and the new competitors. Although discussed separately for clarity purposes, the themes related to the industry, to consumers and to the government are all pieces of the same puzzle. As such, the relations among themes illustrated in Figures 6.18 to 6.20 are interrelated and coexisting in time. All together they comprise what I propose to be the consumers' argument about the public interest after telecommunication reform in Mexico.

The themes analyzed in this section point out expectations that consumers had of what the performance of the industry should be, and of what the relation between the industry, consumers and the government ought to be, and the ways in which these expectations were not fulfilled. These expectations emerged from and refer to a set of values that consumers considered important based on previous experiences as consumers and/or a culturally shared value system used for evaluation and action. The value claims that consumers explicitly or implicitly included in their letters provided
support to their arguments about the performance of the industry after institutional reform. In the following section on the results of the coding for values, I make these claims explicit and discuss how the use of values in the consumers' argument changed over time.

**Values**

This section addresses the objective, proposed at the beginning of this dissertation, of identifying the values expressed by consumers and the priority given to them over time as a step in the reconstruction of the consumers' public interest argument. The importance of examining values is that they shed light on the criteria used by consumers to evaluate the actions of the different actors involved in the sector. Their value claims are also important argumentatively speaking as they provide support, that is, act as warrants to the consumers' public interest claims.

As stated in Chapter 3, the codification of values was done using van Dijk's (1998) four dimensions of values: Character, action, interaction, and society. This classification was useful because it allowed me to identify the specific object or subject that was being evaluated and what were the desired qualities attached to each such entity. For instance, values of character focused on the evaluation of the personal qualities of employees and of the companies as entities, particularly Telmex; action values were mostly used by consumers to evaluate the performance of Telmex as a company, in the dimensions of connectivity, affordability, and equipment-oriented quality of service; values of interaction, on the other hand, evaluated the qualities that were considered desirable or undesirable for consumers in their face to face encounters
with the providers' employees or with government officials. In this sense, they were mostly used to evaluate people-oriented quality of service. Finally, society values included references to qualities or modes of conduct that consumers considered desirable for consumers as a group and for society in general.

It is important to point out that because of the nature of the data source, that is, because the letters were mostly complaints, consumers tended to refer to undesirable qualities or modes of conduct more often than to desirable ones. To facilitate the codification, however, the subcategories within each of the categories of values referred to the values themselves, that is, to the desirable quality that consumers considered absent in a particular event. So, for example if a consumer complained about Telmex's inability to provide dependable service, the unit was codified as referring to the value of reliability.

Figures 6.21 and 6.22 illustrate the distribution of units of analysis and consumer letters per category of value. As in the case of themes, the distribution based on units of analysis is more significant for the purposes of this dissertation because it indicates the total number of times that consumers made value claims implicitly or explicitly pointing to the importance of a particular value or value subtheme. The distribution by letter, on the other hand, illustrates how many letters include references to either a value or value subtheme. Because value claims are used as a support for an argument there was only a reduced number of units of analysis that actually referred to values. As a result, the number of units of analysis that were coded under the category of "Other" was the highest compared to those for themes and performance. Of the total
Figure 6.21: Distribution of units of analysis by category of value (1991-2001)
Figure 6.22: Distribution of consumer letters by category of value (1991-2001)
2,821 units of analysis identified in the letters, only 1,728 referred to values. The distributions shown in Figures 6.21 and 6.22 below correspond then only to the 61% of the units that were coded under the remaining four categories of values.

Also similar to the case of themes, the results of the distribution of letters and of units of analysis by category differ from one another. In this case, however, the difference was with respect to the categories ranked in first and second place. Based on units of analysis, the distribution ranked values of interaction in first place with 39% of the units, followed by the category of action with 36%. Meanwhile, the distribution of letters placed action first with 35% of the letters and interaction second with 32%. The categories of character and society were ranked third and fourth in both distributions. Once again, I consider that the distribution by units of analysis provided a more accurate picture of the quantitative importance of the different dimensions of values as it counted each time that consumers referred to a value.

Since consumers had very strong reactions to their experiences whenever they interacted with the service providers' employees, it is not surprising that the values of interaction were ranked first in consumers' letters. As discussed above, it was in these interpersonal interactions that consumers realized the blatant lack of cooperation and the exercise of power on the part of Telmex and even some new competitors. Similarly, it is not surprising that action values also appeared often in consumers' letters since the purpose of these letters was precisely to exercise voice, that is, to criticize those aspects of service that were not on a par with the level of performance expected by consumers after the privatization of Telmex.
The distribution of units of analysis over time for the different dimensions of value also showed interesting trends. One principal finding was that there were divergences in the peaks for the different categories over time. As expected, the categories of character and action tended to follow the bimodal distribution already observed in the results for performance. These two categories of value peaked in 1993-1994, when consumer complaints about equipment-oriented quality of service rose, and a second time at the beginning of the competition period, as a result both of the consumers' possibility to choose and of their increased discontent over rate increases and the high number of disconnections.

The categories of interaction and society, however, did not follow the same pattern. The category of interaction only peaked once, during the years 1997-1998 at the beginning of the competition period, reflecting the highest peak in people-oriented quality of service complaints. Meanwhile, society, unlike any of the other categories in the analysis, peaked during the crisis year of 1995. In the themes results section I stated that it was also during the crisis years that consumer complaints tended to refer more often to the formal and informal institutions that affected Telmex's performance, such as issues of power, industry policies, and the importance of telecommunications. Similarly, with respect to performance, it was during these years when the dimensions of affordability and choice began gaining importance in consumer letters. Thus, the coincidence of these two shifts in perspective with the peak of socially oriented values during the crisis period seems to indicate that the strong impact of the crisis on the ability of consumers to have access to or to remain on the network made consumers more prone to empathize with other consumers.
Also as a consequence, consumers tended to consider in their letters not only the personal impact of these problems but also how they affected society as a whole. In this sense, even though society-related values were the least used by consumers, they were the most significant in terms of the public interest argument. This is because the appearance of social values demonstrated, in my opinion, that consumers are able to go beyond their own situation and abstract from their own experiences those conditions and values that are desirable for the realization of the public interest.

Even when this capability of abstraction was more evident in the dimension of social values, the subcategories of values that emerged in the dimensions of character, action, and interaction also shed light on other values that consumers considered to be in the public interest. Table 6.1 below summarizes the list of subcategories that were identified within each dimension of value. Instead of discussing each of the categories of values independently, the analysis of value claims will look at how consumers related certain values to specific themes and dimensions of performance as part of their evaluations of the industry's performance and of their public interest argument. To this end, the categories of character and action are discussed together in their role as expressions of evaluations of performance and warrants for themes such as industry policies and broken promises. Interaction values, on the other hand, are considered value claims linked to people-oriented quality of service and issues of power; while society values, as stated above, are analyzed as the most explicit value claims that referred to the public interest.
<table>
<thead>
<tr>
<th>Dimension of Value</th>
<th>Subcategories of Value</th>
<th>Related Themes</th>
<th>Related Dimensions of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Character</strong></td>
<td>Fairness</td>
<td>Telmex's policies</td>
<td>Billing, connectivity, and equipment oriented quality of service</td>
</tr>
<tr>
<td></td>
<td>Honesty</td>
<td>Definition of self and others</td>
<td>People-oriented quality of service</td>
</tr>
<tr>
<td></td>
<td>Responsibility</td>
<td>Definition of self and others</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trustworthiness</td>
<td>Gap between promises and actions</td>
<td></td>
</tr>
<tr>
<td><strong>Action</strong></td>
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</tr>
<tr>
<td></td>
<td>Transparency</td>
<td></td>
<td>Billing and collection</td>
</tr>
<tr>
<td></td>
<td>Competence</td>
<td></td>
<td>People-oriented quality of service</td>
</tr>
<tr>
<td></td>
<td>Excellency</td>
<td>Efficiency</td>
<td>Equipment-oriented &amp; people-oriented quality of service</td>
</tr>
<tr>
<td></td>
<td>Legality</td>
<td>Relation between Telmex and the government</td>
<td></td>
</tr>
<tr>
<td><strong>Interaction</strong></td>
<td>Power</td>
<td>Power</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Responsiveness</td>
<td>Lack of cooperation, lack of solutions, gap between promises and actions</td>
<td>People-oriented and equipment-oriented quality of service, billing and collection, choice, connectivity</td>
</tr>
<tr>
<td></td>
<td>Politeness</td>
<td>Power abuse</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
<td>Relation between Telmex and the government</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respect</td>
<td>Lack of cooperation, power</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Empathy</td>
<td>Lack of cooperation, power</td>
<td></td>
</tr>
<tr>
<td><strong>Society</strong></td>
<td>Access</td>
<td>Importance of telecommunications, industry policies, efficiency</td>
<td>Connectivity, affordability, equipment-oriented quality of service</td>
</tr>
<tr>
<td></td>
<td>Social protection</td>
<td>Definition of self and others (government, consumers), rulemaking (actions and consumer rights), industry policies, power</td>
<td>Affordability, connectivity, billing and collection, choice</td>
</tr>
<tr>
<td></td>
<td>Growth</td>
<td>Rulemaking, competition, definition of self and others</td>
<td>Choice, quality of service</td>
</tr>
<tr>
<td></td>
<td>Nationalism</td>
<td>Competition, Rulemaking, definition of self and others</td>
<td>Choice</td>
</tr>
<tr>
<td></td>
<td>Justice</td>
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</tbody>
</table>

Table 6.2: Relationship between subcategories of value, themes, and dimensions of performance
Evaluating performance: Character and action values

In their evaluations of performance, consumers tended to refer both explicitly and implicitly to the failure of Telmex and, later on, of the other service providers, to demonstrate values of character and action. In the case of Telmex's performance, the value most referred to was undoubtedly 'efficiency', with 45% of the character and action units referring to it. The evaluations of Telmex's inefficient service underscored the importance that consumers gave to the qualities of reliability, accuracy, and speed. These values were respectively linked to equipment-oriented problems that resulted in recurrent line failures, to problems with incorrect billing and collection, and to references to the theme of time waiting for repairs and installation:

"Lastima por Teléfonos de México que mancha la imagen del país con servicios tan deficientes" (esp920904.txt)
[It is a shame for Teléfonos de Mexico that it stains the country's image with such deficient services]

"Todo esto demuestra que Telmex sigue siendo la misma compañía ineficiente e incompetente" (spe970609.txt)
[All this demonstrates that Telmex is still the same inefficient and incompetent company]

"con la finalidad de que los usuarios contemos con una fuente fidedigna del número de llamadas que hacemos y recibimos." (spl970221.txt)
[with the purpose that users have a trustworthy source of the number of calls that we make and receive.] (Underline added).

For consumers, many of the problems of inefficiency were linked to the bureaucracy that characterized Telmex before and after its privatization:

"sin que hasta la fecha hayamos concluido ésta, por causas que realmente desconocemos, así como resultado del burocratismo existente entre su personal." (esp000401.txt)
[so far we have not concluded it for reasons that we truly don’t know, as well as a result of the existent bureaucracy among your personnel.]
Other problems, however, were considered the result of poor training, incompetence, and dishonesty demonstrated by the providers' employees or by the company as a whole:

"Esta empresa telefónica sigue siendo la misma compañía incompetente con el peor servicio al cliente" (spe970609.txt)
[This phone company continues being the same incompetent company with the worst customer service]

"Asimismo los grandes consorcios privados también requieren 'finanzas sanas'" (spe991015.txt)
[Big private consortia also require 'healthy finances']

What then was the consumers' definition of "efficient service"? Based on consumers' claims, efficiency meant making a true effort to avoid inefficiencies by providing fast and reliable service that is billed in an accurate and transparent fashion. It is not a system without failure, but a system in which the problems detected and reported by consumers are rapidly solved by competent employees, thus demonstrating the provider's sense of responsibility toward its subscribers.

"y tratar de solucionar sus deficiencias no dejando que vayan en aumento." (spe991213.txt)
[and to try to solve their deficiencies so as not to let them increase.]

"es reconfortante saber que no estamos perdidos, que aún existe gente en este país con ganas de salir adelante efectuando su labor excelentemente" (esp960704.txt)
[it is comforting to know that it is not a lost cause, that there are still people in this country with the will to improve by doing excellent work]

With respect to character, consumers pointed out two main traits that they expected from their service providers: fairness and trustworthiness. Fairness ranked first among the values of character with 40% of the units of analysis referring to this category and was used by consumers to point out how unfair Telmex's policies and
practices, such as incorrect billing and collections, were for them. The evaluation of these practices as unfair fired up sentiments of injustice on the part on consumers, thus providing support also to their claims of victimization:

"es inadmisible que Teléfonos de México sea el único que cobra, aún cuando no haya dado el servicio" (esp921029.txt)
[it is inadmissible that Teléfonos de Mexico is still the only one that gets paid, even when it has not provided service]

"La respuesta de Telmex siempre ha sido la de 'primero pague y después averigüe', lo cual no me parece justo" (spl970213.txt)
[Telmex's answer has always been 'pay first and find out later' which I don't consider to be just]

"Lo único que pido es pagar lo justo, no pido nada regalado a Telmex." (spl980930.txt)
[The only thing I am requesting is to pay what is fair, I am not asking from Telmex anything for free]

The value of trustworthiness is particularly important for the purposes of this dissertation. It has already been discussed that the experience of broken promises and the gap between expectations of performance and actions resulted in consumers establishing a mistrusting relation with Telmex:

"Ante lo anterior, solicito su apoyo para que se haga del conocimiento general que Telmex no cumple" (spl970609.txt)
[In view of this, I request your support so that it becomes common knowledge that Telmex doesn't keep [its promises].]

In contrast to fairness, trustworthiness was only mentioned in 10% of the units referring to the category of character; yet it is an important value because its presence cements the relationship between consumers and providers; lack of trust, on the other hand, can make "institutions collapse" (Sissela Bok, as cited in Quinn, 1980, p. 358). Further, from a public interest perspective, truth-telling is one of the four necessary
norms that, according to Christopher Quinn's definition of public interest explained in
Chapter 1, contribute to the realization of the public. Quinn (1980) expounds that:

Insofar as man is rational and would treat all other individuals as worthy of
equal consideration on his part as he would give himself, man is obligated to tell
the truth in his dealings with others. . . [T]o intentionally lie to another is to
treat the other as an object, a means rather than an end, an It rather than a

It is this objectification that consumers resented in their dealings with Telmex and
which also contributed to their definition of self as victims. By treating consumers as
objects and intentionally and repeatedly lying to them, Telmex created an obstacle for
the realization of the public as a condition of rational discourse, and also denied
consumers their worth as rational agents. In this sense, the lack of trust between
consumers and the incumbent provider became an impediment for the realization of the
conditions of public interest.

It is then not surprising that consumers considered honesty and trustworthiness
desirable features of their service providers and its employees. These values, together
with those referring to the desirable characteristics of action, such as efficiency,
competence, and transparency could be considered to provide the foundations for an
equitable relation between consumers and telecom operators. From the consumers'
perspective, the absence of these values then facilitated the development of a
relationship of inequality between them. As discussed above, inequality and power
relations go hand in hand in the consumers' argument of public interest. The following
section looks at some of the subcategories of values that emerged when consumers
evaluated their relations with service providers after the reform.
Evaluating relationships: Values of Interaction

In their evaluations of their interaction with the employees of the different service providers, consumers put together ideal modes of conduct that they considered constituted the concept of "service". Many of these values were connected to the consumers' desire to engage in a relationship in which both parties—consumers and industry representatives—were treated as equals, and in which cooperation and respect were reciprocated. Quinn (1980), whose definition of public interest as 'the conditions for rational discourse' is used as a model in this dissertation, considers that the values of humility and respect are central to the concept of public interest because they embody the realization of individuals as rational agents engaging in action with others and thus finding themselves "obligated to attend to the professed insights of others, and obligated to communicate any such insights [they themselves] perceive" (p. 354). He states that the adoption of the value of respect as a fundamental value in the realization of the public implies regarding "all rational agents . . . as worthy" (Quinn, p. 354).

The values of interaction that emerged from the consumers' letters pointed out their need of being considered worthy rational agents. Six values were identified under the category of interaction: accountability, empathy, politeness, power, respect, and responsiveness. The combination of these six values integrates what consumers considered customer service ought to be. Of the six values identified above, power ranked first, with 33% of the units of analysis that referred to interaction. The negative qualities of power were linked to undesirable modes of conduct, such as lack of respect,
rudeness, and lack of responsiveness and of empathy on the part of the providers' personnel, that resulted in consumers being treated as objects and in the denial of their worthiness as rational agents:

"Quizá para las personas que han recibido nuestro reporte sea un número más" (esp930420.txt)
[Perhaps to the people that have received our report it is just one more number]

"la ausencia de interés que ustedes muestran hacia mi petición... es preocupante y bastante humillante." (esp911018.txt)
[the lack of interest that you show towards my request... is worrisome and quite humiliating.]

"¿Es tan grave solicitar un servicio por el que ya pagamos y pedir, además de atención, un elemental respeto hacia nuestra persona?" (esp921007.txt)
[Is it such a serious [offense] to request a service for which we have already paid and to request, in addition to attention, an elementary respect toward our person?]

For consumers, rudeness was a particularly poignant form of disrespect, especially when the employees they were having contact with where supposed to be trained to interact with consumers and provide them with answers to their problems. Thus, politeness, empathy, and respect appeared to be values closely interconnected and in which the view of consumers as rational agents is emphasized. Rude language or attitudes, on the other hand, were usually linked to issues of power imbalance.

According to consumer letters, consumers were mistreated because they lacked power or because an employee had specific characteristics that made them particularly powerful and therefore "untouchable", such as having connections with someone at a higher administrative level within the company. For instance:

"y me contestó muy groseramente que no es su problema" (esp961126.txt)
[and he answered very rudely that it is not his problem]

"¿Esta 'empleada' es protegida o recomendada de alguien y cree que no le pueden hacer nada, y por eso es tan pelada y prepotente?" (spb980310.txt)
"no sin sufrir la desgracia de encontrarme con un policía, ya no digamos atento, irrespetuoso, convencido, supongo, de que el uniforme lo hace socio de Slim"

[not without suffering the misfortune of meeting with a policeman, who not only wasn't, let’s say, attentive, but [was] disrespectful, convinced perhaps that the uniform makes him Slim's partner]

Respect and equality were then considered necessary, though not sufficient, conditions of desirable customer service:

"Exijo respeto para nosotros los usuarios" (esp950627.txt)
[I demand respect for us the users]

"Considero que debe haber una correspondencia entre Telmex y sus usuarios, sin ventajas que originen malos entendidos y conflictos" (spa980323.txt)
[I consider that there should be a correspondence between Telmex and its users, without advantages [underline added] that originate misunderstandings and conflicts]

Other qualities mentioned as desirable features of service were closely related to values of action and character; for instance, having competent and polite employees that respond in a fast and effective manner to consumer concerns. But, perhaps above all, consumers want attention; they want to be listened to and for their pleas to be taken into consideration:

"La empresa mexicana Teléfonos de México, SA de CV, ha olvidado qué tan importante es el servicio al cliente." (spe991213.txt)
[The Mexican company Teléfonos de Mexico, SA de CV has forgotten how important customer service is]

"considero que los empleados que tienen trato directo con el público consumidor de sus servicios deben ser más selectos, mucho muy educados y en ningún momento prepotentes o groseros en sus respuestas" (spb980310.txt)
[I consider that the employees that have direct contact with the public who consumes your services should be better selected, much more educated and never prepotent or rude in their answers]
In sum, the values that consumers gave priority to when referring to their interactions with the service providers emphasized the importance of equality and respect. Considering consumers worthy of service and attention seems to be a prerequisite for other values of service, such as responsiveness, politeness, and empathy, to occur. In the case of their relation with Telmex, because of its failure to recognize them as rational agents, consumers in their role of victims are treated disrespectfully.

According to Quinn, respect is a fundamental value for the realization of the public interest and it should be manifested in a reciprocal manner in the relationships between rational agents as equals and between agents and the authorities. To this point we have seen that consumers considered that in their relation with Telmex the value of respect and the norm of truth-telling were not present. As is discussed below in the section on society values, these values seemed to be absent in the relation of consumers with the authorities, also.

**Evaluating national policies: Values of society**

The codification of society values underscored five values in the consumers' letters: access, growth, justice, nationalism, and social protection. As stated above, it was interesting that these values, in contrast to those of the categories of interaction, action, and character, tended to peak during the crisis years and into the beginning of the competition period. Even when throughout the ten years considered in the analysis...
some consumers abstracted beyond their own situation to ponder the impact that a
problem had on other users, this tendency became stronger when consumers considered
that a greater number of people could be affected because of the trying times the
country was going through. To me, this exercise in abstraction and empathy
emphasizes the consumers' ability to go from what could be considered exclusively a
personal interest towards more socially oriented consumer rights and claims of the
public interest in the area of telecommunications services.

Of the five values mentioned above, the highest ranked was access, with 65
units of analysis (46% of the total units for this category) in 37 letters; social protection
ranked second with 28 units of analysis (20%) in 16 letters, and growth ranked third,
with 17 units of analysis (12% of the total units for this category) in 13 letters. Since
the sample of letters used in this dissertation referred exclusively to the
telecommunications industry, it is not surprising that consumers gave priority to the
value of access over other more general social values, such as economic growth. We
have pointed out that access implies not only connectivity, but a combination of the five
dimensions of performance discussed in Chapter 5.

The importance of access was pointed out by consumers when they referred to
issues of performance such as waitlisting and access under the category of connectivity,
out of service lines and repair time under quality of service, and rates under
affordability. With respect to themes, access was connected to themes such as
efficiency, the importance of telecommunications and industry policies that affected
who got access to the network and when.
It is important to point out that not all the units referring to society values actually make a leap from the personal situation to a social one, but they did underscore the importance that these values had for the individual consumer. In the case of access, for example, the letters that most clearly referred to access as a social value were letters sent by a community, be it a group of neighborhood representatives within Mexico City or representatives of small towns somewhere in Mexico.

In their claims about the value of access, consumers underscored the role of telephony as a necessary service and a consumer right that, as a consequence of Telmex's inefficiency and monopoly policies, consumers in Mexico had not had adequate access to. For instance:

"Uno de los países más poblados del planeta y aún no cuenta con una telefonía a la medida de sus necesidades" (esp950206.txt)
[One of the most populated countries of the planet and it still doesn't have telephone service in proportion to its needs]

"¿Por que no proporcionar en su mayoría el servicio de teléfonos públicos de monedas y no obligar al usuario al uso de tarjeta?" (esp950627.txt)
[Why not provide a majority of coin-operated payphones instead of forcing the user to use a [pre-paid] card?]

Consumer rights were also prominent in the claims that referred to social protection, which derived mostly from what consumers considered the inability of the government to protect them from the abuses of Telmex.

"¿y a los usuarios, quién nos apoya?" (spl970608.txt)
[and who supports us, the users?]

Consumers particularly pointed to the government failure in controlling Telmex's rate increases and the negative consequences of government policies, such as the opening of the telecommunications sector to competition:
"porque con estas alzas injustificadas permite castigar a nuestra ya de por sí deteriorada economía" (spl970603.txt)
[because with these unjustified [rate] increases it allows [Telmex] to punish our already deteriorated economy]

Since the value of social protection referred mostly to consumer rights, it is not surprising that in most of the units coded under this subcategory consumers referred to the consequences that the government actions could have on consumers as a group and on townspeople in general. The social impact of the government's actions and policies and particularly the betrayal of the government role of protecting consumers from Telmex's abuses seemed to negatively affect the consumers' respect towards the authority, a norm that Quinn considers fundamental for the realization of the public interest. One consumer stated in this respect:

"El gobierno mexicano ha vendido la imagen de Telmex con gran maestría de mercadotecnia y sigue haciendo mucha propaganda para que afuera los extranjeros crean en la modernización de México. Los que vivimos aquí luchamos con la realidad." (esp930402.txt)
[The Mexican government has sold the image of Telmex with great marketing mastery and it continues proselytizing so that foreigners outside the country believe in the modernization of Mexico. We who live here have to deal with the reality]

The inability or perhaps unwillingness of the government to oversee Telmex was also criticized by consumers for the impact it had on the achievement of economic policies oriented towards the development of the country and its population. Among some of these policies were the goal of NAFTA of increasing competition and of Telmex's privatization to improve the performance and extension of the telephone network:

"El país necesita que la visión de los empleados, así como la de los empresarios, cambie para llegar a un progreso real, no sólo de palabra." (spe991213.txt)
"¿Es posible que esta Infraestructura en comunicaciones nos permita competir en el TLC?"
[Is it possible for this communications infrastructure to allow us to compete in NAFTA?]

The references to nationalist sentiments emerged in the traditional bimodal pattern, with a peak in 1993 and another just before the beginning of long distance competition. While the few references from 1993 focused on the relationship between the government and Telmex, those of 1996 represented the consumers' response to Telmex's nationalist advertising campaign. In this campaign Telmex appealed to the nationalist sentiments of the consumers to rally against "foreign" companies, such as AT&T and MCI-WorldCom, who were partners with the new long distance service providers Alestra and Avantel, respectively.

Yet the consumers' frustration with Telmex's performance during the monopoly period and the eagerness with which they were awaiting competition made it difficult for consumers to support Telmex just because of being a Mexican company. For those consumers who actually supported it by showing loyalty, the increases in measured service rates that occurred after the end of the monopoly were just one more example of Telmex's lack of social responsibility:

"no es justo depositar nuestra confianza en mexicanos y que nos respondan volteando la espalda ante la crítica situación económica que atravesamos."  (spl970603.txt)  
[it is not fair for us to place our trust in Mexicans when they respond by turning their back on us during the critical economic situation that we are going through.]

"No importa que no sea una empresa 100 por ciento mexicana, nuevamente le pregunto: ¿Sirve de algo que Telmex lo sea?"  (esp960314.txt)  
[It doesn't matter that it is not a 100% Mexican company, once again I ask you: Is it of any use at all that Telmex is [one]?]
Finally, the value of justice summarized the expectations of consumers regarding the role of the government in the telecommunications sector: enforcing existing laws and controlling Telmex's abuses, so that the promises of privatization and competition may be fulfilled and consumers may have access to this basic service.

"confiando en que la justicia existe, y sobre todo debe existir la respuesta a un servicio que estamos pagando bastante bien." (esp911115.txt)  
[trusting that there is justice, and above all, there should be an answer to a service for which we are paying quite well.]

"Exijo justicia, porque me siento impotente al no poder frenar estos abusos" (spa970616.txt)  
[I demand justice, because I feel impotent as I am not able to stop these abuses]

"y que efectivamente la calidad en los servicios que ofrece Telmex mejore para el bien de los usuarios y de la misma empresa" (spl970605.txt)  
[and that indeed the quality of the services Telmex offers improves for the well being of the users and of the company itself]

In sum, the values of society illustrated the consumers' evaluation of government policies and of the impact of these policies on consumers, on the rest of the population, and on the economic growth of the country. Much as in the case of the other dimensions of value, consumers pointed to unfulfilled expectations and stated value claims regarding what ought to be, particularly with respect to the role of the government in overseeing the industry and protecting consumers for the well-being of the country.

Going back to the objective proposed at the beginning of this dissertation of identifying the values expressed by consumers and the priority given to them over time we have seen that the four dimensions of value—character, action, interaction, and society—were important to consumers throughout the ten year period of analysis. Yet the relative importance of one dimension of value over the others changed over time.
reflecting changes in the performance of Telmex. In terms of units of analysis, interaction was the dimension that consumers referred to most often, influenced in part by the primacy given in consumer letters to the power relation that existed between consumers and Telmex. An interesting finding regarding the distribution of value dimensions over time was that "society" was the only category that peaked during the crisis years indicating the influence of this event on the consumers' tendency to empathize with other consumers and to abstract beyond their own problems towards social problems.

In conclusion, the analysis of the codification results for performance, themes, and values uncovered several claims made by consumers about the performance of the telecommunications industry after institutional reform and what their expectations were about the changes that should have come about with such reform. The analysis of performance results made evident that consumers are quite sensitive to deterioration in performance and also revealed the importance given by consumers to people-oriented quality of service, one of the areas in which Telmex's improvements over time were less noticeable. The major claim that emerged from this section was that Telmex was considered an inefficient company that failed to provide services to the level expected by consumers in the areas of connectivity, affordability and quality of service. For consumers, real access is only accomplished when operators provide efficient service in each and every one of these dimensions of performance.

The analysis of themes revealed a variety of claims about the actors involved in the sector: the industry, consumers, and the government. Interestingly, the analysis pointed out that, in the consumers' view, these three actors were intimately connected in
a relationship characterized by inequality of power. Three primary claims emerged from the analysis of this relationship: (a) Telmex exercises power over consumers through its policies and actions; (b) consumers are powerless before Telmex and feel victimized by it; and (c) the government has failed to protect consumers from those abuses by protecting Telmex.

To support these claims consumers provided several other claims that emphasized violations to basic interaction and communication principles, such as maxims of cooperation and violations of trust. The claims about Telmex's inefficient service that dominated the performance results function as premises or evidence for these higher claims.

Finally, the analysis of values provided the third piece of the consumers' argument. It revealed the consumers' value claims from which stemmed their expectations of performance and of the type of relationship that ought to exist between the different actors in the sector. As such, these value claims provided support, or in argumentative terms, acted as warrants for the consumers' claims about the sector. The analysis of value claims was also important because it made evident another series of violations of values and norms necessary in the realization of the conditions for the public interest. Some of these violations included lack of respect, trust, and truth-telling, but most importantly they pointed out an objectification of consumers that denied them equal status as rational agents.
Based on these claims, what then is the consumers' argument about the public interest in telecom? My proposed answer, based on the analysis presented in this chapter, is empowerment. In the concluding chapter I reconstruct the consumers' public interest argument and from it I provide some policy recommendations that address the issue of empowering telecom consumers in Mexico.
Endnotes

1  In 2001, the complaints against new providers represent 67 percent of the letters published, but this high percentage needs to take into consideration that the sample for 2001 includes letters sent until March and not during the whole year.

2  The decrease in the number of complaints published in Space of the Reader since 1999 coincides with the decrease in the number of formal complaints against Telmex submitted to Profeco (see Figure 5.14).

3  Besides the State of Mexico, other states from which consumers sent letters include Guanajuato, Guerrero, Jalisco, Morelos, Puebla, Querétaro, Tlaxcala and Veracruz.

4  When coding for business lines, I considered lines that belonged to a company, as well as those that were residential lines but that according to information provided in the letter were used by the subscribers to conduct business.

5  "Wiring" refers to letters were the complaint mentions problems created by the installation of lines, such as ditches or bad work done while repairing the streets after installing underground lines.

6  By December of 2001, Telmex had 913 thousand subscribers to its Internet service; meanwhile the number of America Móvil's mobile subscribers reached 17 million (Telmex, 2002; America Móvil, 2002).

7  The distribution of performance criteria by units of analysis presents a slightly different picture. The two peaks are still present, one in 1993-94 and the other during 1997-98, with quality of service strongly contributing to both peaks in 1993 and 1998.

8  It is important to clarify the difference between speed and waitlist. Although these two categories referred to time elapsed, when coding, I included in speed of installation any references to the time it took for the service provider to install the line once the new subscriber had paid for it. Waitlist, on the other hand, referred to the time consumers had to wait to get even the chance to contract a line in their area.

9  Held orders include those requests for new service, transferred services, added line services and change of service.
In Mexico, people say that someone is "riding money around" when they are using money illegally for other purposes than for what it was intended to. It is a form of fraud.

For an extended definition of each of the themes refer to Chapter 3.

I say almost absolute control because there was competition in mobile service, even if limited to a duopoly, from the time of Telmex's privatization, as explained in Chapter 4.

Recall that, as stated in Chapter 4, the government kept its non-voting stock in Telmex until 1994.

See for instance the remarks of President Carlos Salinas with respect to the goals of the privatization of Telmex in Chapter 4.
CHAPTER 7
CONSUMERS' CONSTRUCTION OF THE PUBLIC INTEREST
IN TELECOM REFORM: CONCLUSIONS AND IMPLICATIONS

Answering the research question

The driving force of this dissertation was the interest in finding out how the members of the public constructed the meaning of the public interest in their opinions of the policies and outcomes of telecom institutional reform in Mexico. To answer this research question I now focus on reconstructing the consumers' argument of the public interest based on the different individual arguments or claims that emerged from the coding of performance, themes, and values in Chapter 6.

The claims that emerged from the codification of themes are particularly important to the reconstruction of the consumers' public interest argument because they pointed to the type of relation that, in the view of consumers, existed between the three main actors (consumers, industry, and government) and to the conditions that made such a relationship occur the way it did. In the previous chapter I organized the themes based on the actors they referred to. In this chapter I reorganize the themes according to their level of abstraction, differentiating between those themes that referred mostly to concrete events, such as efficiency, consumer actions, and emotions, and those that pointed to relations or structures. Table 7.1 illustrates this thematic division, showing
Table 7.1: Reorganization of main themes based on the consumers' argument of public interest

<table>
<thead>
<tr>
<th>CONCRETE EVENTS</th>
<th>FACILITATING CONDITIONS</th>
<th>EXPECTED SOLUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Events/Evidence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>★ Inefficient service (equipment-oriented quality of service)</td>
<td>Government: ★ Regulations ★ Bureaucracy</td>
<td>★ Consumer rights</td>
</tr>
<tr>
<td>★ Abuses from employees (people-oriented quality of service)</td>
<td>★ Industry: ★ Telmex's policies ★ Relation government-Telmex ★ Telmex's monopoly status ★ Choices (lack of / need for) ★ Incompetence and unresponsiveness of employees</td>
<td>★ Better evidence available</td>
</tr>
<tr>
<td>★ Telmex's excessive profits</td>
<td>★ Consumers: ★ Lack of evidence available to consumers</td>
<td>★ Government defense of non-active consumers</td>
</tr>
<tr>
<td>★ Importance of telephone service to consumers</td>
<td>★ Consequences ★ Consumer emotions ★ Consumer actions</td>
<td>★ Increased choices</td>
</tr>
<tr>
<td>★ Consequences</td>
<td>★ Lack of Control</td>
<td>★ Increased competition in different services</td>
</tr>
<tr>
<td>★ Consumers:</td>
<td>★ Technological improvements (e.g. meters)</td>
<td>★ Empowering consumers</td>
</tr>
</tbody>
</table>

Victimization ★ Power Inequality ★ Lack of Control
how consumers tended to organize the relations between concrete events, the conditions that facilitated them, and some actions or policies that they considered would empower consumers before Telmex and other service providers.

From an argumentative perspective, claims that referred to more concrete themes served as supportive arguments (evidence or premises) for claims relating to more abstract relations, included under the column of facilitating conditions in Figure 7.1. So for instance, Telmex's inefficient service was explained, in the consumers view, by its condition as a monopoly provider, as well as by the incompetence and unresponsiveness of its employees, among other factors. By the same token, the more abstract themes provided support to the consumers' implicit argument about the existence of power inequalities among the different actors, an inequality that was concretized in the consumers' sense of victimization and of lack of control. An analysis of the types of relations, contingent or necessary, that exist between the different conditions and events exposed in the consumers' argument is beyond the scope of this dissertation. Nevertheless, the general description of connections that is provided in Table 7.1 could be used as a stepping stone towards this end.

To answer the research question put forward at the beginning of this dissertation it is now necessary to look at the themes presented in Figure 7.1 from an argumentative perspective and connect the different claims that emerged from the analysis of codification results to construct what I propose to be the consumers' public interest argument. As stated in Chapter 6, three main arguments or standpoints emerged from the analysis of the letters: (a) Telmex exercises power over consumers through its policies and actions; (b) the government has failed to protect consumers from such
abuse by facilitating the realization of Telmex's power; and therefore, (c) consumers feel powerless before Telmex and define themselves as its victims. Figures 7.1 to 7.3 reconstruct each of these three arguments using the reconstruction transformations, explained in Chapter 3, of addition, deletion, permutation, and substitution. Using these transformations, the multiple arguments put forward by the different consumers were reorganized; implicit claims were made explicit, and repeated claims were reduced into a single one to make the consumers' standpoint on each of these three primary claims as clear as possible.

It is important to clarify that these argumentative reconstructions represent only one side of the argument. Usually, argumentation analyses study the standpoints of two language users, taking the roles of protagonist and antagonist, who are involved simultaneously in an argumentative discussion. In contrast, the present analysis focuses on reconstructing the argument of a single language user, "the consumer", as a composite of each of the different consumers who wrote letters to the newspaper. In their letters, consumers take the role of protagonist and present their points of view—either positive or negative—about each of the single arguments that constitute their main argument. Telmex and, to a lesser extent, the other service providers represent the consumers' antagonist in absentia. Nevertheless, their presence is assumed by consumers in their attempt to convince the operators of the consumers' position or to attack the service provider's point of view on a specific topic of dispute. By the same token, the antagonist (Telmex) is expected to provide a contra-argumentation to each of these arguments in order to convince consumers of its point of view and rebut the consumers' initial expressed opinion.
Figure 7.1: Reconstruction of the consumers' argument on Telmex's power
The government facilitates Telmex's power and fails to protect consumers

- SCT granted Telmex monopoly control over telecom services for six years
  - Telmex has power over consumers & Monopolies exercise power over markets because it is a monopoly
  - Telephony is a basic and necessary service for consumers

- The privatization of Telmex failed to improve the operator's performance
  - The government decided to privatize Telmex & Privatization is expected to improve performance
  - SCT does not hold Telmex accountable for its failure to improve performance and meet standards & Accountability of service providers to the public and authorities is necessary to ensure performance up to standards
  - SCT fails to restrain Telmex from being abusive and inefficient & Authorities are expected to protect consumers from industry's abuses

- Privatization did not change the close relation between the government and Telmex
  - Profeco sometimes decides in favor of Telmex even when the operator is mistaken & Profeco is expected to be an impartial and fair mediator

- Privatization allowed Telmex more profits at the expense of consumers

- The government protected Telmex from competition
  - The close relation between Telmex and the government facilitated Telmex to engage in anticompetitive practices & Competition provides incentives to improve performance
  - & Competition provides consumers the option of exit

Figure 7.2: Reconstruction of the consumers' argument on the government's support to Telmex
Consumers are powerless victims of Telmex

Consumers get no solutions from Telmex & Customer service is expected to provide solutions

Consumers’ request for service and repairs usually go unheard

Telmex’s employees fail to cooperate with consumers

Employees are indifferent to consumers’ problems & Consumers deserve to be taken seriously

Employees lie to consumers & Consumers expect providers to tell the truth, be polite, and provide sufficient information

Employees are rude

Employees lack empathy

Employees do not listen to consumers & Consumers expect customer service to listen to consumers’ claims

Telmex repeatedly fails to follow through with its promises & Truth-telling and trust are necessary in the relationship between consumers and providers

Consumers have no control over their decisions about telecom services

Telmex does not respect consumers’ decisions & Consumers deserve respect

Operators, not consumers decide when and how service is provided

Consumers had no possibility of negotiating alternative terms with providers

Consumers lack access to evidence accepted as valid by providers

Figure 7.3: Reconstruction of the consumers' argument on consumers' victimization
Consumers' claims regarding the performance of the telecommunications industry in Mexico after institutional reform are compound or complex arguments, composed of multiple single arguments, as illustrated in Figures 7.1 to 7.3. Specifically, in my opinion, each of the three reconstructed arguments can be considered co-ordinative compound arguments. This means that the single argumentations included within them (shown in blue) are conjoined, and thus, all of them, as a group, are necessary to support the initial opinion. For example, in Figure 7.1, the consumers' initial expressed opinion was that Telmex exercised power over them. This standpoint was supported by the co-ordinative compound of arguments, illustrated in blue. Similarly, some of the conjoined arguments in blue are themselves composed of co-ordinative compound arguments.

The argumentation structures shown in Figures 7.1 to 7.3 also include unexpressed premises that were made explicit so as to make the arguments valid. These premises made reference to principles that consumers considered to be shared by and acknowledged as valid by the antagonist, and are represented in the Figures after the ampersand symbol. The unexpressed claims were closely linked to the value claims that emerged in the analysis of values, as well as to the values and norms that, according to Quinn (1980), contribute to the realization of the conditions of the public interest, such as respect and truth-telling.

The question now is the relationship between the three main arguments stated above and the consumers' public interest argument. As illustrated in Figure 7.4 below, based on the consumers' letters, these three arguments seem to be subordinated to each
other, forming an argumentative chain that supports the single unexpressed claim that consumers need to be empowered. In this sense, although there are three arguments, their subordinate relation in fact encloses them within the main public interest standpoint of consumer empowerment.

Thus, making explicit the consumers' implicit claim, I propose that the standpoint of telecommunication consumers in Mexico about the public interest is that in order for the public interest to be realized, consumers need to be empowered vis-à-vis telecommunications service providers. The focus on consumer empowerment is
supported by the recurrence of power issues in the consumers' discourse and by the
discursive emphasis that consumers gave to the different facets of power in their
relationship with Telmex. Power is implicit in the consumers' complaints of
victimization; in their attempts to exercise agency, and in their criticisms of the
conditions that allow Telmex to exercise power over them. Of the sample of letters
used in this study, 68 percent (187 letters/793 units of analysis) contained thematic units
referring to issues or power or to disempowering conditions. Similarly, when coding
for values, 64.9 percent of the letters (180 letters/623 units) included units that referred
to the value of power or lack of respect within the dimension of interaction.

I consider, however, that empowering consumers before the telecommunications
service providers is a necessary, though not sufficient condition for the realization of the
public interest in this industry. Other conditions need to be in place for the public
interest to be realized, such as the existence of effective competition in the different
telecommunications markets; a regulatory framework that promotes competition and
controls the exercise of market power on the part of the incumbent operator, while
providing incentives for the provision of services and increased access; as well as the
existence of a regulatory agency able to implement such regulations to the benefit of all
the actors involved in the sector, particularly consumers.

A second objective of this dissertation with respect to the reconstruction of the
consumers' public interest argument was identifying changes in the argumentative
structure over time. I consider that the basic argumentation structure of consumers
illustrated in figures 7.1 to 7.4 did not change during the ten year span analyzed in this
dissertation. What changed was the type of concrete events that consumers used as
evidence to support their claims about the performance of the industry during the
decade. As I pointed out in the section on the codification of performance, as the
performance of Telmex improved in equipment-oriented quality of service, consumers
tended to pay more attention to other areas of performance that became problematic,
such as billing and disconnection. Yet, for consumers, the perception that Telmex was
inefficient and that it abused consumers remained unaltered; the changes occurred only
in the type of problems (or evidence) that made them put forward such standpoint.

Another factor that contributed to the stability of the consumers' public interest
argument over time was that the monopoly structure of Telmex and the uncooperative
attitude of Telmex's employees—two of the conditions that supported the consumers'
claim that Telmex exercised power over them—persisted virtually unchanged throughout
the period of analysis. Even though competition began in 1997, Telmex still had
monopoly power over all the markets during the whole period of analysis. As for the
problems with the employees' attitude and other aspects of people-oriented quality of
service, there were some improvements in performance, particularly in terms of
politeness. Yet consumers complained about insufficient information, and lack of
cooperation and solutions until 2001. Thus, I consider that the reconstructed arguments
illustrated in Figures 7.1 to 7.4 did not change over time, but were supported and
reinforced by different types of evidence throughout the years, in response to changes in
the performance of the industry.

I have proposed that the consumers' main standpoint regarding the public
interest in telecommunications is that consumers need to be empowered. In Chapter 6 I
presented some of the conditions and actions that consumers considered made them
powerless before Telmex and other service providers. In the following sections I summarize these conditions and propose some policy recommendations to address them, so as to contribute to the amelioration of the conditions that until now have impeded the realization of the public interest in Mexico, according to consumers.

**Empowering consumers**

Empowering consumers would require addressing the different conditions that consumers identified as obstacles in the realization of their interests as consumers. In their letters, consumers pointed out their expectations of what telecommunications services ought to be in Mexico after institutional reform, particularly in the case of Telmex. They also identified some conditions that helped them in their search for solutions when such expectations were not met by the service providers. As summarized in Table 7.2 below, consumers distinguished some conditions that helped empower them and some that disempowered them before the service providers.

Some of these conditions were directly linked to the knowledge, capabilities, and resources of the individual consumer; others depended on the consumers' relationship with other actors, such as the press and the government; finally, other conditions were more socially oriented, motivating consumers to take action not just because of the problems that affected them personally, but in pursuit of improvements that would also result in benefits to other consumers.

More importantly, as discussed in Chapter 6, some of the conditions that disempowered consumers also impeded the realization of the conditions of rational discourse, and thus, of the public interest as defined by Quinn (1980). The
objectification of consumers, concretized in the lack of respect and the unequal footing that they had with respect to the industry was the most important obstacle faced by consumers as rational agents. Other obstacles to the realization of the conditions of the public interest included the lack of respect for authorities and the relation of mistrust among the different actors. Identifying these obstacles is just a first step. The challenge now is to take the necessary measures to strengthen the conditions that empower consumers and modify those that contribute to their objectification and that make them feel as victims.

Based on the list of conditions included in Table 7.2 it is evident that some of these conditions will be easier to address than others. Bureaucracy and corruption, for instance, are not exclusive to the telecommunications sector and are deeply engrained in the institutional practices of the Mexican government. On the part of consumers, the lack of respect for authorities is a practice reinforced in the day to day encounters between these two actors. Inducing changes in these institutions is not impossible, but will require changes well beyond the realm of the telecommunications sector. On the other hand, some of the disempowering conditions affecting the consumers' personal motivations to exercise voice or exit, such as time, money, and lack of evidence might be easier to address for policymakers by implementing policies that facilitate the complaint process both at the level of the individual service provider and in agencies like Profeco.

The will to empower consumers of telecommunication services needs to begin with the realization by policymakers of the relations and conditions that affect the consumers' footing before service providers, as well as of their role in facilitating such
<table>
<thead>
<tr>
<th>Consumer expectations/petitions</th>
<th>Empowering conditions</th>
<th>Disempowering conditions</th>
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<tr>
<td>• Service quality improvements:</td>
<td></td>
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<tr>
<td>- Speed</td>
<td>• Emotions</td>
<td>• Personal motivations</td>
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<tr>
<td>- Responsiveness</td>
<td>• Availability/knowledge of different complaint avenues</td>
<td>• Time</td>
</tr>
<tr>
<td>- Fair and prompt investigation of consumer disputes</td>
<td>• Available evidence</td>
<td>• Money</td>
</tr>
<tr>
<td>- Fair billing (transparency)</td>
<td>• Choice (exit)</td>
<td>• Fear of retaliation</td>
</tr>
<tr>
<td>- Competent and polite employees</td>
<td>• Importance of telecommunications (access)</td>
<td>• Lack of evidence</td>
</tr>
<tr>
<td>• Respect</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Improved control through meters (equipment)</td>
<td></td>
<td>Unsupportive relationships / activities</td>
</tr>
<tr>
<td>• Improved management</td>
<td></td>
<td>• Relation government –Telmex</td>
</tr>
<tr>
<td>• Solutions</td>
<td></td>
<td>• Mistrust and lack of respect to authority</td>
</tr>
<tr>
<td>• Government protection of consumers and enforcement of their rights</td>
<td></td>
<td>• Bureaucracy</td>
</tr>
<tr>
<td>• Government oversight of the industry</td>
<td>• Profeco (consumer protection agency)</td>
<td>• Corruption</td>
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<tr>
<td>• Promotion of competition (choice)</td>
<td>• Personal connections</td>
<td>• Incompetence</td>
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<td></td>
<td>• Newspaper</td>
<td>• Lack of responsiveness of employees</td>
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<td></td>
<td>Social change and social justice</td>
<td>• Employees' lack of respect and cooperation towards consumers</td>
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<td>• Defending non-active consumers</td>
<td>• Threats to competition</td>
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<td>Social injustice</td>
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<td>• Abuse of consumers</td>
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<td>• Lack of control</td>
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<td></td>
<td></td>
<td>• Lack of choice (possibility of exit)</td>
</tr>
</tbody>
</table>

Table 7.2: Consumers' expectations and main conditions that empower and disempower consumers
conditions. This dissertation intends to contribute to this realization. The consumers' expectations of service expressed in their letters to the Editor pointed to specific areas of performance that needed improvement. Their complaints and proposals constituted the basis for the policy recommendations I propose below, trying to provide an answer to the critical question, how can it be otherwise?

**Policy recommendations**

How can consumer empowerment be achieved? A good starting point would be to provide consumers the tools they require to improve their footing when dealing with telecom service providers. Two measures come to mind. One refers to the problem of evidence. Consumers complained strongly about lacking evidence that would allow them to support their complaints about mistakes committed by the providers, particularly in the areas of measured service billing. The introduction of meters in residential telephones would be a very useful instrument for consumers because it would allow them not only to compare the operator's register of calls made, but it will also allow them better control over the number of calls made from a telephone number. This would be particularly useful for low-income consumers that would like to remain within the 100 free calls level. As stated before, the Ministry of Communications and Cofetel are already looking into developing such meters in Mexico. If implemented, this measure would be well received by consumers and would help alleviate the consumers' impression that the telecom authorities favor the service providers (particularly Telmex) over consumers.
It is important to consider, however, that with the introduction of meters, issues of reliability need to be addressed, and there is also the possibility that service providers might disagree with the implementation of this measure, generating a new area of dispute between the regulator and the operators.

A second measure would be the development and implementation of a consumer bill of rights that clarifies for consumers their privileges and responsibilities when contracting and using telephone services in Mexico. To address some of the problems identified in the consumers' letters, this bill should, at a minimum:

1. Establish a uniform method of dispute resolution that allows consumers to pay only for the undisputed part of a bill until a dispute is solved, without having to face the threat of disconnection.

2. Provide consumers better information regarding the disconnection process, so that they are aware of their rights and responsibilities.

3. Establish a standard for service contracts so that they include all the necessary information that consumers may require at the time of signing, during the provision of service, and at the time of cancellation.

4. Provide consumers the possibility of negotiating with the service provider an alternative payment plan when they have incurred a debt, instead of requiring full payment to avoid disconnection.

5. Facilitate the complaint handling process at the level of the individual provider and within the consumer protection agency, so that less active consumers and those that would not ordinarily complain because of monetary or time restraints, would face less difficulties in exercising voice.
The need to facilitate the expression of voice becomes even more urgent during a period of imperfect competition like the one Mexico is currently in. Hirschman (1970) points out that the most quality conscious consumers are those who most commonly tend to use voice in a monopoly situation, but they are also the first ones to exercise the exit choice when this option is available. The diminishing trend in the number of complaints published about telephone service providers in *The Space of the Reader* (illustrated in Figure 6.1) and in those received by Profeco (illustrated in Figure 5.13) in the late 1990s, after the opening of telecom markets to competition, seems to support Hirschman's point that the activists are less often exercising the option of voice now that exit is available. This points out a double peril for the less vocal consumers in Mexico. The exit of the most quality-conscious consumers tends to result in the loss of the most vocal members of the group, leaving behind with the deteriorating firm those consumers who are less alert, or able or inclined to use either exit or voice to express their opinions.

Since the least vocal members are "captured" by the deteriorated company, the best way to help these consumers is by educating them about the available channels to express voice and by developing easier and less costly ways for them to exercise this option effectively. Hirschman (1970) points out in this respect that once voice is recognized as a mechanism with considerable usefulness for maintaining performance, institutions can be designed in such a way that the cost of individual and collective action would be decreased. . . . Often it is possible to create entirely new channels of communication for groups, such as consumers, which have had notorious difficulties in making their voice heard, in comparison to other interest groups. (p. 42)
The barriers that currently exist in the complaint handling process implemented by Telmex and, particularly, by Profeco need to be eliminated so as to facilitate access from consumers that would otherwise be non-active. Among potential barriers Moyer (1984) lists the location of the service, and the degree of literacy, knowledge, language skills, and persistence required to use the service (p. 81). Williams (1996) also includes as a deterrent to complaining the requirement of sending written complaints. He points out that forcing consumers to adjust to the business' terms in handling problems, such as the need to provide written complaints, "often generate[s] the aggressive response associated with (in social terms) having to take the fight to your enemy's territory" (p. 20).

If we take into account that the literacy level among low income consumers in Mexico tends to be low and that these consumers tend also to be less active in using voice or exiting a deteriorating provider, it is particularly important to develop new and easier means to encourage them to express their opinions and submit their complaints. Day et al. (1981) and Hirschman (1970) propose that the creation of decentralized consumer assistance centers provides cheap and effective mechanisms to enter complaints and to motivate non-complainants into taking action.

Consumer education should also focus on providing consumers information about the exit option, on addressing information asymmetries faced by consumers with respect to the cost of exit, and on the selection and comparison of service providers. Of particular interest would be information about deposits, cost of connection, and penalties for early cancellation of contracts, among others. Similarly, information on the price structure and the quality of service provided by incumbent and competitive
operators would allow consumers to make better informed choices now that exit is an option in all the telecommunication sectors to varying degrees.

We have seen that as a result of the atomization that characterizes individual residential and small business consumers they have less influence on the finances of their service provider and thus their claims and requests tend to be more easily ignored than those of major clients. A way to address this problem may be to empower consumers by bringing about the conditions that would facilitate the creation of consumer advocacy groups. As the agency responsible for protecting consumers, Profeco might promote town meetings or other activities that would allow activists to meet each other and perhaps get organized as a group. In this way, small consumers might be able to exercise voice and actually obtain responses from their service providers.

The participation of consumer voices is an important factor in fulfilling the conditions for the realization of the public interest. Quinn (1980) states in this respect that for rational discourse to become public discourse it is necessary that the condition of "access" is fulfilled. He proposes that

Rational discourse is the discourse of the public only when each individual's interest claims can be introduced into the discourse and be scrutinized should any party so desire. In a public, all individuals must have access to the forum for rational discourse, wherein their interest claims may be pressed. (Quinn, 1980, p. 302)

In the case of telecommunication consumers in Mexico, access needs to be realized in two ways. First, consumers need better access to the telecommunication network. As stated in previous chapters, real access implies not only ensuring the connectivity of the
members of the population to the telecom network, but also ensuring that the conditions under which such connectivity is provided allow consumers to use a service that satisfies their needs in terms of quality of service, affordability, innovation and choice. To this end, it is necessary that consumers are able to express their needs to those who provide the service and to those who set the policies and rules that regulate the sector.

Other scholars have emphasized the connection between access and the realization of the public interest in the telecommunications sector, but they conceive access only in terms of one of the aspects stated above. Aufderheide, for instance, defines the public interest as "access to and use of telecommunications" (1987, p. 81), while Nicholas Johnson (1979) emphasizes the need for greater organized public participation in the policy arena and defines the public interest as "a process, not a policy" in which the needs and points of view of all citizens should be equally considered. I propose that both aspects of access are interrelated and that both are necessary for the realization of the public interest. The participation of the weak, of the powerless in the policy process plays an important role, as Alessandro Pizzorno (1995) points out. Pizzorno's "communitarian" interpretation of the power of the weak underscores that

[...] the basis of the power of the weak is the need for the community to periodically reassess unity. The presence of the powerless in the process of the formation of power is the guaranty of the collective identity. In that process, the weak and the strong classes join together in some sort of mystical union. This is not just momentary, or illusory, union. The powerless classes have something of relevance to give to the powerful, aside from the guaranty of unity. Being powerless and unsuccessful, they live in a special tension toward the future, where some sort of redemption may take place which would put an end to their misery and subjection. The classes which already have power and success now, have less reason to know any tension toward the future. But the collectivity as a
whole may require this tension, thus needing the special contribution of the lower classes, or their representatives. (Pizzorno, 1995, p. 84)

Encouraging access requires a supportive environment in which the authorities protect consumers and their rights, as much as those of the service providers. To promote this supportive environment it is necessary that the institutions already entrusted with the protection of consumers, such as Cofetel and Profeco, work efficiently and fulfill their roles in the eyes of the constituents. To this end, these agencies need to achieve legitimacy before the members of the public, as they seem to have lost the trust and respect of consumers, based on the consumers' letters, as a result of what consumers perceived as a tight relationship between the government and Telmex during the private monopoly period.

The need for legitimation is particularly important in the case of Cofetel. To me it was surprising that even when the agency was created at the end of 1996, only two letters referred to it as an actor within the sector. The role of the agency within the industry is currently being discussed in the revisions of the Telecommunications Law and the discussion has underscored the importance of Cofetel acting as an independent and fair participant in the regulatory process. Cofetel's efforts to regulate Telmex as a dominant provider have been hindered up to the present through legal resources, such as injunctions. Yet Cofetel's efforts seem to have helped to attenuate the idea among competitors that the authorities are protecting Telmex.

Based on the consumers' letters, it is unclear if consumers have interpreted Cofetel's measures in the same manner. Legitimation before the public might require the commission to implement policies that benefit consumers directly and not just through the trickle-down effects of regulatory reform. Currently, the commission does
not participate in the dispute resolution process between consumers and the telecom sector; this role is still a duty of Profeco. The organizational changes proposed in the Telecom Law revisions still maintain Cofetel isolated from consumers. This decision may be appropriate because of the commission's current difficulties in dealing with an excessive number of legal cases, but in the long run it might hurt its legitimacy before members of the public. In this context, Cofetel's best option seems to be protecting consumers through the implementation of policies that promote their interests, such as a bill of rights, and participating in better educating consumers about their rights and the role of Cofetel in protecting them. To respond to consumers' needs, it would be useful for Cofetel to be attentive to consumers' voices and to be open to their input.

In sum, I consider that the empowerment of telecommunication consumers in Mexico requires policymakers to take actions so as to ensure that consumers will have greater access, choice, and control within the sector. Access implies exercising voice and that this voice to be taken into consideration to improve performance; choice gives consumers the ability to express their opinion through exit, and control over their decisions and actions would help consumers feel respected and be encouraged to take action when the service providers fail to respect them. By providing consumers the tools they need to get on an equal footing with the telecom operators, policymakers would also facilitate the conditions for consumers to be respected as rational agents and thus, for the realization of the conditions for the public interest.
**Key limitations**

The analysis of the sample of consumers' letters provided valuable information that can be used to improve policymaking by empowering consumers. Yet it is important to acknowledge some of the limitations of this study that need to be considered when evaluating the findings. Perhaps the most important limitation was that the sample of letters did not include as many representatives of consumers from rural areas and from other states as expected, even when the selected newspaper is nationally distributed. I believe that getting to know the opinions and problems faced by this group of consumers would have made the results even more valuable as they would have allowed me to determine if there were palpable differences between the priorities and interests of these consumers and those in Mexico City and the State of Mexico.

The few letters clearly identified as coming from others states included interesting information about the role of payphones in small towns and the value of access for these communities that definitely enriched the findings. In future research, it might be useful to extend the number of data sources, including perhaps more popular newspapers or newspapers published in other states to improve the probability of rural consumers being included in the analysis. Even then, it is possible that rural consumers may be underrepresented, as they tend to possess some of the demographic characteristics that the research on consumer complaints has identified as typical of less vocal non-action consumers, such as lower levels of income and education. If this is the case, it may be necessary to use a different method, such as interviews or focus groups, to adequately capture the concerns of rural consumers in Mexico.
Also, as stated in Chapter 3, the fact that the selected newspaper column was used by consumers mostly to express their complaints about their telecommunications services influenced the type of performance evaluations given by consumers. However, even when the consumers' evaluations of performance pointed out the failures more often than the successes, I tried to extract from these comments the areas of performance that were of importance to consumers beyond the actual performance of the provider in such areas.

Finally, a more complete comparison of the actual performance of Telmex to the consumers' appreciation of such performance was limited to a certain extent by the unavailability of more detailed data on the performance of Telmex on quality of service criteria. As stated in chapter 6, this was the area that consumers complained about the most but also about which Telmex provided the least data in its annual reports. This limitation underscores the importance of developing a reliable database on the performance of the industry that includes the different dimensions of performance presented in this dissertation. To my knowledge, Cofetel and an important research center in Mexico have already realized this gap and are already looking into developing such a database.

Implications for future research

The analysis of consumers' opinions regarding the performance of the telecommunications industry after institutional reform provided useful information regarding their priorities and the main obstacles faced by consumers when dealing with service providers. Among the priorities are the importance of consumer control over
decisions and information, as well as access to information and evidence that would allow them to have a better footing in their dealings with providers. Choice is also a very important factor for consumers as it not only expands access to different suppliers, technologies and services, but also extends the options available to consumers to express dissatisfaction with the quality of service provided by an operator from the option of using voice alone to a selection between voice and exit. Finally, the analysis also pointed out the importance of the quality of face to face interactions between consumers and operators' employees. Empathy and respect, as Quinn proposed, are of particular importance to consumers. This information can help regulators and policymakers better understand the needs of the public with respect to telecommunication services.

The analysis of the consumers' public interest argument after institutional reform can be also extended to the discourse of other populations, such as that of telecommunications operators and policymakers. Understanding the similarities and differences in their constructions of the public interest would provide a more complete picture of the obstacles for mutual understanding and for the realization of the public interest in the sector that policymakers need to address in their policies so as to facilitate a dialogue between the different actors involved in the sector.

The analysis of the consumers' letters also pointed out several areas of study in which communication theories may provide new insights. The application of Grice's maxims to the obstacles faced by consumers in dealing with Telmex's employees is a
case in point. An analysis of the consequences that cooperation violations may have on the consumers' propensity to complain might be of interest to scholars in business and marketing.

Another interesting finding that emerged from the analysis was the importance of trust in commercial relations like the one that consumers have with the telecom service providers. Anthony Giddens' and Niklas Luhmann's theories on trust, power, and modernity could provide a foundation for a more in-depth analysis of the conditions that negatively affect the establishment of trust between consumers and providers, as well as of the conditions for the reestablishment of trust once it has been lost in a relationship.

This dissertation also touched upon the expectations of performance that consumers created in response to the promises made in the policy discourse that accompanied the implementation of institutional reform of the telecommunications sector in Mexico. Analyzing the relation that exists between policy discourse and the creation of expectations of performance in the public could be a first step towards an integration of communication theory, telecommunications policy, and policy analysis approaches, such as the Argumentative Turn, in the analysis of the policymaking process and its effects on society. By learning how a sample of consumers in Mexico defines the priorities and values surrounding the implementation of institutional reform in the telecommunications sector, the present study has extended the findings of the Argumentative Turn to a population previously understudied. It has also confirmed
that, similar to other actors involved in the policy process, consumers use argumentation, supported by shared values, to persuade others of their own claims and interests.

Finally, the analysis of the conditions that help to empower or disempower consumers could be extended to other sectors in which deregulation and institutional reforms have taken place, such as financial and health services. For instance, in a recent interview, former SEC Chairman Arthur Levitt pointed out the need to organize individual investors—who at the individual level, much as residential telecom consumers, are "totally impotent"—"into forming groups that would represent their interests and at least would understand what's been happening to them by these other very influential groups" (NPR, Morning Edition, October 10, 2002). Assisting in the empowering of consumers before powerful industries and in the promotion of a more democratic policymaking process through the analysis of these conditions would be, without a doubt, the most important contribution that this dissertation could provide.
Endnotes

1 In contrast, the Secretariat of Communications was mentioned in eight letters and Profeco, the agency that consumers referred to most often, was mentioned in 38 letters (14% of the total sample of letters).
GLOSSARY

<table>
<thead>
<tr>
<th><strong>access channels</strong></th>
<th>Number of fixed and ISDN lines per 100 inhabitants.</th>
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<td><strong>access paths</strong></td>
<td>The total of fixed access lines and of cellular mobile subscribers.</td>
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<tr>
<td><strong>broadband</strong></td>
<td>Digital technologies that provide integrated access to voice, high-speed data, video-demand and interactive delivery services through a signal switched facility.</td>
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<td><strong>cumulative average growth rate (CAGR)</strong></td>
<td>Also known as geometric growth rate, estimates the average rate that is representative of the available observations over a period of time.</td>
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<td><strong>calling party pays</strong></td>
<td>A billing method that allows a wireless phone caller to pay just for calls made, instead of paying for both calls made and calls received.</td>
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<tr>
<td><strong>concession title</strong></td>
<td>License issued by the Secretariat of Communications and Transport (SCT) to Teléfonos de México to operate telecommunication networks in Mexico. It specified the terms and conditions of the company's monopoly status until 1996 and set requirements for interconnection and pricing. It was revised and approved in December of 1990.</td>
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<tr>
<td><strong>cramming</strong></td>
<td>Whenever a telecommunications service provider bills a customer for services that were not provided or that were not ordered by the subscriber, such as voice mail, caller-ID and call waiting.</td>
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<tr>
<td><strong>incumbent local exchange company (ILEC)</strong></td>
<td>Name given to the public telecommunications operator that provided services in a market under a monopoly status before the entry of new competitors to such market was allowed by regulators. It is the operator that first provided services to an area.</td>
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<tr>
<td><strong>Local Multipoint Distribution Systems (LMDS)</strong></td>
<td>Broadband wireless technology used to deliver voice, data, Internet, and video services in the 25-GHz and higher spectrum (depending on licensing). LMDS systems use cellular-like network architecture, though services provided are fixed, not mobile.</td>
</tr>
<tr>
<td><strong>Rate Rebalancing</strong></td>
<td>The process by which the rates for long distance services are decreased and those for local services increased so that they reflect more closely their cost of provision.</td>
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<tr>
<td><strong>Slamming</strong></td>
<td>The practice of switching a customer's service provider of local or long distance services from one operator to another without the subscriber's authorization.</td>
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<tr>
<td><strong>Teledensity</strong></td>
<td>The number of telephone main lines installed per 100 inhabitants.</td>
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<tr>
<td><strong>Universal Service</strong></td>
<td>Policy concept that refers to providing access to basic telephone service to all members of a population at affordable prices.</td>
</tr>
<tr>
<td><strong>Weighted Average Cost of Capital (WACC)</strong></td>
<td>The average cost of financing the company's assets, weighted by the cost and relative importance of each of the components of total capitalization.</td>
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<tr>
<td><strong>X Factor</strong></td>
<td>An adjustment factor that reflects improvements in the telecommunications provider's operating efficiency, or in its forecasted productivity.</td>
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APPENDIX A

TELMEX'S PRICE CAP REGIME
In this appendix I describe the most important features of Telmex's price cap regime. As stated in Chapter 4, Telmex's Concession Title, revised before its privatization in 1991 established a price cap regime to regulate the company's prices. Under the price cap rate system, Telmex's rates for a "basket" of basic telephone services are subject to a controlled ceiling price. The services in the basket include installation charges, basic monthly rent, measured local service for residential and business subscribers, and national and international long-distance rates for residential and business subscribers. Within the controlled range fixed by the price cap, Telmex is free to determine the structure of its own rates, without need for SCT's approval. The Ministry of Communications, however, has the power to modify rates whenever it is required in the public interest.

By including in the controlled basket of services both local and long distance rates, the price cap at the very least constrains the average revenue that Telmex can obtain from these retail services. From a regulatory perspective, establishing a single controlled basket of basic services facilitates the accomplishment of Telmex's mandate of rebalancing local and long distance rates. From a business point of view, a single basket provides Telmex with flexibility to balance reductions and increases in prices among services. For instance, a reduction in long distance rates gives the company some latitude to increase rates in local service, as long as the average revenues from all the controlled services are within the cap, but with the added restriction that residential
rates cannot be higher than incremental cost (OECD, 1999, p. 272). The flexibility of having a single basket, however, has as a drawback that it sets a single revenue cap for both local and long distance services.\(^1\) This limitation implies that Telmex can only calculate a single weighted average cost of capital\(^2\) (WACC) for both services and this may lower the profitability of long distance services if the WACC for long distance services is higher than that of local service.

Telmex's price cap formula also allows it to keep prices at pace with inflation because of a controlling factor that varies directly with the Mexican National Consumer Price Index (NCPI). From 1991 to 1996 Telmex was authorized to modify quarterly the rates of the basic services included in the basket so that, taking into consideration the volume of each service consumed during the previous quarter, the total cost of the basket for the following period remained constant in real terms (SCT, 1990b, p. 32). In so doing, Telmex had to ensure that (a) the sum of the adjusted income for each service in the basket under the new rate was not higher than the income or price cap allowed for the whole basket; (b) that the changes in rates for local service were within the maximum increase authorized by SCT; and (c) that the total allowed revenue for the whole basket was kept constant by adjusting it to inflation, applying a "quarterly adjustment factor \(X^n\)"\(^3\) with a value of zero (SCT, 1990b, p. 34).\(^4\)

In a country like Mexico, where high rates of inflation are common,\(^5\) quarterly adjustment of rates to the NCPI may usually result in regular increases in nominal telephone service rates. Although the adjustment to inflation provides Telmex some stability in its level of revenue, it has a negative impact on consumers. This is because
increases in nominal rates act as a disincentive for telephone usage and may result in an increased number of consumers dropping from the network. Consumers' wages, including the minimum wage, are usually increased once a year and the new wages may not necessarily be adjusted to inflation. Thus, relative to the consumers' wages, the rates for telephone services are increasing at a faster pace in nominal terms, reducing the consumers' ability to pay for these services. This appears to be the reason why SCT required Telmex to temporarily freeze the nominal measured local service rates for both residential and business subscribers during the macroeconomic crisis of 1994 and until the end of 1995, a period when inflation increased by 61.43 percent, a 2.10 percent monthly increase (Banco de México, 2001; Briceño, 2000).

With the end of the private monopoly in January of 1997 and until December of 1998, Telmex's price cap was to be adjusted downward by 0.74% quarterly in accordance with the company's Concession Title, in order to pass on to customers the benefits of increased productivity obtained during the monopoly stage. This measure resulted in a total downward adjustment of 3 percent per year. Beginning in 1999 and every four years thereafter, the adjustment factor "X" is set by Cofetel, based on a study, submitted by Telmex, of the estimated average incremental costs for the controlled basket. Based on this study and Telmex's proposed tariffs, Cofetel sets an initial level for the basket and for the "X factor" that is considered to allow Telmex to obtain a rate of return of the controlled services equal to its weighted average cost of capital (WACC) (SCT, 1990b, p. 35).
In accordance with this mandate, in 1999 Cofetel revised the value of the "X" factor. Telmex and Cofetel, however, did not reach an agreement on the new X value and, following procedure, a panel of experts was asked to intervene. This panel, consisting of an expert selected by Telmex, one selected by Cofetel, and one selected by mutual consent, submitted its verdict and Telmex's price cap formula for the 1999-2002 period was set at 4.5 percent (OECD, 1999, p. 272). It is expected that the increased X factor will result in a 16.1 percent reduction of the average rate for the controlled basket of basic services. According to Cofetel, by the end of 2000, the cap of the basket of controlled basic services was 30 percent lower than that originally set in 1991 (Cofetel, 2000, p. 51).

With respect to value-added services (integrated services digital network, private circuits, directory services, and digitally based services like call waiting, speed calling, and automatic redialing), Telmex is free to establish its rates free of rate regulation on a competitive basis, except for the requirement that it register its rates with Cofetel before they are used. Nevertheless, the government reserved to itself the capability to begin regulating value-added services should competition prove non effective, or in case of abused monopoly power in pricing them.

Following the rules used for Telmex's value-added services, the Federal Telecommunications Law of 1995 also gives the new concessionaires freedom to determine their rates for retail services, as long as the tariffs allow operators to provide services under conditions of "quality, competitiveness, safety, and permanence" (SCT, 1995). Like Telmex, the new concessionaires are required only to register their tariffs
with Cofetel 15 days before they come into effect. The Commission then has a period of ten days to authorize the registration.\(^6\) It is important to point out that even when the rules for determining the new concessionaires’ service rates are limited in number, they still provide the regulator two ways to intervene on the rate setting process, one by delaying authorization for registering rates,\(^7\) and second by calling upon the conditions under which such services are rendered. These strategies could be used to exert pressure upon Telmex or even the new competitors.

Complaints from the new competitors have already resulted in increased regulation of Telmex's service rates, after it was declared "an agent with substantial power" in five telecommunications markets by the Mexican Federal Commission for Competition (COFECO). Among the new obligations imposed by Cofetel in its resolution of September 2000, Telmex is required to set the weighted average rate for long distance and other competitive services at a level that allows it to recover the average cost, including the cost of capital, of rendering such services. Similarly, the rates for "essential services" for the wholesale market (operation support services or OSS), such as co-location, billing and collection, emergency services, operator services, installation, and local transit, among others, shall recover only the costs incurred in providing those services. Finally, in the retail market, Telmex is required to set a uniform rate for local telephone service for the entire territory until December 31\(^{st}\) of 2002, while the other services included in the basket of controlled basic services can only be differentiated by volume, distance, and calling time.\(^8\)
Notwithstanding these new provisions, there is still the possibility for Telmex to engage in anti-competitive practices because of the composition of its basket of controlled basic services. As stated above, the basket includes both local and long distance services for residential and business subscribers. Competition in long distance services began a few years before that in local telephony, and although both services are currently subject to competition, the degree of competition in each market is not yet equally developed. Having competitive and non-competitive services (or at least less competitive services) within the same basket gives Telmex an incentive to cross-subsidize competitive services with revenues derived from non-competitive services. That is, Telmex has the incentive to aggressively reduce rates of long distance services and increase the price of local services, as long as it can balance any losses incurred in the competitive market with revenues from the non-competitive market, where demand is less elastic. The strategy of decreasing rates for competitive services would allow Telmex to exert greater pressure on its new competitors and improve its chances to maintain its current level of subscribership in the competitive market.

A study conducted by OECD (1999) states in this respect that the only area where Telmex may be able to shift the burden of cross-subsidization is by recovering most of the common costs from the local business service (pp. 272-3). This is because of the existing limitations in setting rates for local residential service so that they are not above incremental cost, and for long distance service and competitive services where rates shall only recover their average costs plus the cost of capital.
So far, in spite of competitors' allegations, there is no clear evidence that Telmex has engaged in cross-subsidization, even when after the entry of competition in long distance in 1997, Telmex's long distance prices decreased sharply and local rates increased. The rapid change in prices for these services might be the result of the delay in completing the process of rate rebalancing due to the mandated freeze during the economic crisis, as Telmex and Cofetel claimed (OECD, 1999). According to the OECD (1999) after Telmex was declared a dominant provider, Cofetel considered establishing separate baskets for Telmex's local and long distance services.

If, as Cofetel claims, Telmex's tariff rebalancing process has already concluded, having separate baskets could be more of a benefit for Telmex than an additional limitation. It would restrict its ability to cross-subsidize, but it would also allow it to set a weighted average cost of capital appropriate for each service, instead of a single WACC. Two baskets would negatively impact Telmex only if tariff rebalancing is not really finished.
Endnotes

1 In the case of the United States, until recently, local telephone service providers, such as the Regional Bell Operating Companies, and long distance service providers, such as AT&T, Sprint, and MCI, were prohibited from entering into each other's markets. For this reason, in contrast with the case of Telmex, there are two separate controlled baskets of basic services, one for local telephone service and one for long distance, and, with the exception of subscriber line charges, tariff rebalancing only takes place within the charges included in each basket. For U.S. telecommunications companies, the limitations in the flexibility for rebalancing are compensated for by their ability to apply the weighted average costs of capital (WACC) that corresponds to each service, instead of having a single WACC applied to both local and long distance services, as in the case of Telmex.

2 The Weighted Average Cost of Capital or WACC is defined as the average cost of financing the company's assets, weighted by the cost and relative importance of each of the components of total capitalization (SCT, 1990b, p.33).

3 The "X factor" refers to an adjustment factor that reflects improvements in the telecommunications provider's operating efficiency, or in its forecasted productivity. The company has partial control over this factor, as its productivity is affected by managerial decisions about investment, employment, purchases, organizational structure, and service development policies (Melody, 1997). William Melody (1997) asserts, however, that productivity factors are also dependent of companies outside the control of the telecommunications operator, such as service markets and developers of information and communications technologies, as well as software (p.180). The value of the X factor is usually the result of a negotiation process between the telecommunications operator and regulators.

4 Notwithstanding these requirements, World Bank experts are on record as stating that overseeing Telmex's rate changes was very difficult for the SCT and that "annual tariffs were resolved more by negotiation than by the rules stipulated in the concession and [Communications] Reglamento" (Wellenius & Staple, 1996, pp. 3-4).

5 According to data from the Mexican central bank, Banco de México, Mexico's annual rate of inflation has been above 6.0 percent during the last ten years, reaching double digit rates in five occasions. The highest annual rate of inflation registered was in 1995, during the macroeconomic crisis, when inflation reached 46.45 percent. The central bank estimates that the rate of inflation for the period from January 1991 until
July 2001 at 397.76 percent, that is, a monthly rate of inflation of 1.28 percent (Banco de México, 2001).

6 Based on article 31st of the Telecommunications Rules, approval of a company's pricing structure is based on the following criteria: (a) rates shall be cost-oriented and no discount plan or rebate should be applied that reduces the price of service below its direct cost; (b) avoidance of cross-subsidies among services rendered by the same company, except when expressly authorized by the SCT; (c) pricing structures shall be set at an internationally competitive level; (d) prices should generate reasonable margins of profit based on existent economic conditions; (e) prices shall promote an efficient expansion of services and furnish the basis for healthy competition in the provision of service; (f) rates shall not be discriminatory in nature nor obstruct access to services; and, (g) the methods employed to calculate rates shall be clearly established (SCT, 1995).

7 According to an OECD report (1999), in some occasions Cofetel has taken up to a month to decide about registration (p. 273).

8 The resolution contemplates the possibility of allowing Telmex to geographically differentiate local telephone service rates beginning in 2003; this practice is also known as "geographic deaveraging" (Cofetel, 2000, p.28).
APPENDIX B

EXAMPLES OF CONSUMERS’ LETTERS TO THE EDITOR
OF THE NEWSPAPER EL FINANCIERO
"Adventure" with Telmex in Veracruz

Mr. Director:

I have been an assiduous reader of your newspaper for a long time; for this reason I am writing to relate to you my "adventure" with Teléfonos de México (one more in the never ending chain of complaints against this company).

In July of 1991 I acquired a house located in the street of Bernal Díaz del Castillo N°. 152, apartment complex Virginia, Boca del Río, Ver., which had two telephone lines disconnected for lack of payment because the property had been empty for several months.

Immediately, even before moving to my new house, I went to Telmex to make the late payments and to request that the lines be reinstalled. For one of the lines I only owed two months, for the time during which the other one had been disconnected, because of which I had to pay approximately a million pesos to revive it; I was assigned a new phone number for this last line.

After two months of waiting for the line to be reinstalled and of reporting the numbers almost every day, finally at the beginning of September my wife went before the manager of Telmex's business office located at Bolívar N° 756, Veracruz, Ver., Mister Victor Meruelos Torales, who informed her, in a frankly overbearing way, that he would do anything that was possible for us to be assisted in a "reasonable time." We continued waiting, until one occasion when, for curiosity, I dialed the number that had supposedly been assigned to me, and I was surprised when I found out that said number had already been assigned to another home! Under these circumstances, I went before the same manager, who once more made a photocopy of my application, and in his same scornful attitude and without the smallest interest in the client, told me again to wait a "reasonable time." Finally, last November 2, I got the first number, which hadn't change, connected, but it only worked to receive incoming calls but not to make calls.

On this occasion they informed me that there was a mistake with the other number, and I would have to go to Telmex for them to assign me the correct number. I went again before the aforementioned manager who once again, with his same attitude, requested of me more "reasonable time"; in the face of my indignation, as much in this occasion as in the previous one, this person emphasized that he is the only one that can solve my problems because there is no one else above [his position] in Veracruz.
It is important to point out that I have gone on two occasions before the SCT in the port of Veracruz to denounce these actions, but on both occasions they gave Telmex five business days to respond, and it has not responded yet.

¡Ah! and for Ripley, one of my office's phone numbers (besides those at my house) has been crossed for two months with another line, but I don't want to belabor this topic because I know that your space is valuable.

This is an unbelievable story that I considered was important to publish; this story has not ended yet and if this story gets published it may not end, but it doesn't matter. I consider that we should courageously denounce these type of actions, trusting that justice exists, and mainly that we should get a response from a service for which we are paying quite highly.

I appreciate your attention to this letter.
Engineer Javier Alvarez Escobar.
(summarized letter)
Mr. Director:

Last October 29 I requested at Telmex's business office in Coapa a change of address for my line to [my new domicile which is] four blocks further away. I was forced to pay a million 138 thousand pesos before they allowed me to sign a contract (number 418271) which contains the following penalty provision: "Agrees to wait the necessary time for installation."

Nine weeks later, on January 6, at the window for installation applications in process they only told me what I already knew: these services take time. Searching for more information from the manager’s office, where they didn't want to assist me, they sent me to the person responsible for switches.

Kindly, this employee told me that it is a company policy to only complete new installations and to leave pending repair applications and address changes. I was also informed that the [cost of a change of address] and of a new installation are the same. But almost two and a half months ago this information was hidden from me and they did not offer me to cancel my current subscription and to request a new one. The person responsible for switches also told me that my application has not left the central office yet, and that I will have to wait for Telmex's policies to change for [my application] to move from the file cabinet where it rests today. It is impossible to know when.

That same day I unexpectedly received a bill with a suspension notification that Telmex sent to my old address. The same person regretted that in October they had not informed me either that I should look for my bills at my previous address or at Telmex's branch and pay them on time while my change of address was being processed.

Therefore, Telmex charges very high sums for a service (telephone change) that it has no intention of rendering for an indefinite time. It also charges at the same time for another service (telephone communication) that it doesn't provide. And it sends the bills to addresses where it knows it won't find the addressees. All this is legal. The normal thing is for Telmex's subscribers to pay and wait in silence for whatever that company wants to do with a public service that it was granted. Doesn't this resemble an attack against the general means of communication?

Sincerely
Dr. Daniel Cazés
Switch Is Out-of-service

Mr. Director:

We would appreciate for you to publish this letter supporting the interest of many users of Teléfonos de México, who are under the same or worse conditions than us.

We have been working as a medium-scale industry in the area of Tlalnepantla since 1971. In the last two and a half years, that is to say, from the time of Telmex's privatization, we have verified a worsening of the service rendered by [Telmex], which, on the other hand, is becoming very demanding, requiring [its subscribers’] punctuality in paying the bills.

The service in our telephones fails periodically, especially our switch 3 90 21 77. The manager at the branch of Telmex that corresponds to [our area], in her desperation for not being able to help us, recommends to us to submit our complaint before Profeco.

Sincerely

Hans Joerg Stege S.
Director General
Siegling Mexico, INC of CV.
(summarized letter)
Telmex's Irregular Service

Mr. Director:

Again we see ourselves needing to request of Telmex, through the "Space of the Reader", the setting in operation of our [telephone] line 2 03 03 52: This [line] has provided irregular service since December of 1991, [creating] constant confusion. Is it possible for this communications infrastructure to allow us to compete in NAFTA?

Sincerely

Engineer Roberto E. Wagner D.
General Manager
Industries AMB.
Complaint against Telmex

Mr. Director:

It is lamentable that one has to appeal to the "Space of the Reader" to tend to matters that should be solved at the local level, but unfortunately the one involved is Teléfonos de México, which suffers from [a lack] of quality from wherever one looks at it.

On February 8 my telephone service was suspended, for number 824-72-38. I assumed that a mistake had been made and I went to the branch that corresponds to my area, the Adolfo López Mateos in Atizapan, and, after waiting in line at the [customer service] window, I found out that the reason why my telephone doesn't work is that I didn't pay, but I have at hand my receipt for the quantity of $293.00 pesos properly sealed by the National Bank of Mexico, Inc., Valle Dorado branch, where I paid on February 8, as it verified by check number 19 in the statement of account that I am attaching.

For the above-mentioned, I demand for my telephone line to be reinstalled immediately, not when they want, since the internal administrative problems of Telmex do not concern me; as long as I pay on time they don't have any reason to suspend the service whenever they so desire.

(Summarized letter)
Complaint against Telmex

Mr. Director:

I thought that I would not have the opportunity to write you again, not because of you, but because as a Mexican citizen it saddens me that doing so is necessary in order to solve problems with telephone lines or [problems] of any other nature.

This time I request your support so that the service for my telephone number 824-72-38 is installed, since it stopped working on August 4th.

I went to the branch López Mateos of Telmex, which is the one that corresponds to my address located in Atizapán de Zaragoza. There I found out that I was not suspended for [lack of] payment, but rather that there are a large number of out-of-service lines, and the employee that assisted me doesn't know when they will fix mine.

It seems unjust to me that even when one pays for the service we cannot use it. It doesn't matter if it is due to damage or any other problem; quite simply, I am paying for it and I should enjoy the corresponding benefit.

I know that from the time that I sent you my first letter to request Telmex to fulfill its promises, there is not one day when the "Space of the Reader" does not publish a complaint against this institution. I fervently wish that this type of situations would end, that all of us that contribute with our payments would have the satisfaction of receiving the corresponding service; we should not excuse ourselves [because of] the rain, the wind, or whatever; the reality is that Teléfonos de México is not fulfilling its work in a satisfactory manner.

Sincerely
Alejandra Becerril Montes
Complaint against Telmex

Mr. Director:

I am requesting your valuable help through the "Space of the Reader", so that the enclosed petition is published, because all the inhabitants of the condominium in which I live are without telephone service because of a cable that has been having problems since last month.

Hopefully through this newspaper, which day by day is the best in Mexico, we may obtain some effective attention.

Blanca Rodríguez

Carlos Slim
Director General of Teléfonos de México

I would appreciate for you to request that my two telephone lines, [with numbers] 515-03-20 and 516-43-87, [which have been] continuously reported to 05 from September 5th, be repaired. They are dead, as are the rest of the lines installed in the building where I live because of a cable that has been damaged since the month of August, when I also suffered the lack of service for 10 days. The aggrieved parties are 32 apartments and I am attaching a partial list of them.

Blanca Rodríguez
Melchor Muzquiz 9-504
Col. San Miguel Chapultepec CP 11850
Complaint Against Telmex

Mr. Director:

On November 19, 1993, after many years waiting for lines, they installed my telephone, but without a telephone line.

Telmex's employees informed me that it would be operational in no more than eight working days; they also said that I was assigned the number 712-19-53.

After [8 days], I tested it to see if a miracle had happened, and to my surprise I found out that said number was already assigned to another home where it has more than one year in use, as the users informed us.

Immediately I reported this anomaly; however, the days and weeks are passing by, and after almost two months of all this I simply don't have service. (summarized letter)

Mariana Elena Chávez
Ecatepec, State of Mexico
Complaint against Telmex

Mr. Director:

As an assiduous reader of El Financiero, I have realized that besides being an excellent newspaper, it has helped to solve diverse situations. It is for that reason that I request the following to be published:

Twelve years ago we requested of Teléfonos de México the installation of a telephone line, and our application was registered under the record number 304857. They asked us to call the telephones indicated in the record in August of 1982.

That was the beginning of this story: On countless occasions we have gone to the corresponding offices (they have changed the branch at least once), without obtaining any answer.

In this respect, it is important to clarify two things:
- The application is under my brother's name.
- The name of our street was changed by the authorities.

Hopefully the director of Telmex can do something about this.

Sincerely,

Leonardo García Carbajal
Complaint against Telmex

Mr. Director:

Through this newspaper, I would like to vent my complaint against the service rendered by Teléfonos de México, monopoly of the country's telecommunications, which increases in a harmful and indiscriminate way the charges for its services, and in spite of this, it is not able to provide regular service. My phone number, 250-35-07, has been totally mute for two weeks. I request you to publish this letter, although, in the opinion of one of the operators that receives complaints at the [repair office number] 05, three weeks without service are not a reason to complain.

Sincerely,

Murilo Kuschick
Eight Complaints against Teléfonos de México

Juan Antonio Pérez Simón
Director General of Teléfonos de México

Next you will find the synthesis of eight complaints against the service of Teléfonos de México. The originals together with the attachments to these letters were already remitted via fax the day they arrived to this office.

1.- Thanks to their report [published] in this space, some technicians of Teléfonos tried to repair their lines, but they informed them that the problem is in the underground lines inside the wells, due to adherence and flooding. They insist on the urgent repair of their lines: 264 15 00 and 264 10 11.
Reported by: Franz Xaver Wyss Kaech, general manager of Imocom of Mexico.

2.- He already got tired of reporting his lines 515 39 36 and 271 68 11 to [the repair number] 05. He has thought of reporting them to Carlos Monsivais or José Luis Cuevas and even to Luis Pazos, but he preferred not to do it for reason of principles. He has also considered the possibility of reporting it "to the Group San Angel but it didn't work either [because] they are [dissolving the group]. " Telmex's technicians told him that his cables "drowned".
Reported by: Jesus Ortiz Villaseñor.

3.- For more than a year she has had problems with her line 812 28 51. Now it has been out of service for three months.
Reported by: Juana Virgen Rojo Calderón.

4.- More than a month ago, lightning hit near his house causing his line to be out of service. He finds offensive Telmex's earnings since it was privatized. He requests Telmex to fix his telephone 251 35 34, which supposedly is a digital line.
Reported by: Norberto Terrazas.

5.- In June they transfer the line number 514 57 60 to their home with the new number 660 13 19. She is current in her payments. Some weeks ago her line was disconnected
and now it supposedly belongs to the Castillo family that lives in her neighborhood.
Please correct the problem that has her incommunicado.
Reported by: Olga Y. de Park.

6.- She has reported her telephone number 515 76 32 infinite times without [obtaining an answer.
Reported by: Raquel Enríquez.

7.- She complains that her line 525 85 88 is dead. They have reported it insistently to 05 without any result.
Reported by: Mónica I. Lara of B.

8.- Displeased with the service [rendered] by Telmex; her telephone number 822 98 33 has been out of service for more than 45 days.
Reported by: Verónica Barbosa M.

Looking forward to the telephone problems of our readers being resolved as soon as possible, we thank you in advance for your attention.

Sincerely,

Verónica Ortiz
Coordinator of the "Space of the Reader."
Teléfonos de México collects whimsical charges

Mr. Director:

Recently, Teléfonos de México has been charging different amounts under the items called "SE" and another identified as "IR". Neither of them is explained in the identification codes that appear on the back of the bills.

On the other hand, to call the telephones dedicated to providing clarifications, as indicated in the bills, is simply a waste of time and, of course, [it would] generate charges for "SM", "IV", "SE" and "IR". At this pace, one of these days the code "PM" will appear [in the bills] ([standing for] monopoly power, under which the monopoly will whimsically include other charges).

The results are not satisfactory either when one goes to the offices of Teléfonos de México because they always request the captive client to "pay first and they will give explanations later."

There is no doubt that only monopoly companies, shielded by the authorities that don't oversee them, can have the "luxury" of providing a terrible service and not giving any explanation about the charges they impose, believing that Mexicans are fortune-tellers.

It is urgent to promote competition, both political and economic.

Gabriel Villegas
Complaint against Telmex

Mr. Director:

This is a complaint against Telmex's service in Tultitlán, State of Mexico, because for several weeks I have reported my telephone line 883-53-96 and nobody does anything [about it].

My line sounds occupied [gives a busy signal] all the time. I hope that I can make use of it before the end of the year, since I am up-to-date in my payments.

Liliana Servin
Valentín Trujano, manzana 29, lote 24-A
Prado, Tultitlán, State of Mexico
Has been requesting a telephone line for 13 years

Mr. Director:

Please forward this letter to the Director General of Teléfonos de México (Telmex) because for 13 years we have requested a telephone line and in spite of going periodically to the branch Adolfo López Mateos, in Atizapán de Zaragoza, we have not been given the "invitation" - as they call it - to contract the service.

It was my mother, María Elena Sánchez, who first filled the application in October of 1983 (I attach copies of my application record). I want to know how much longer must we await, or if I should will the application to my son so that he can keep on insisting.

Gilberto del Valle Sánchez.
Complaint against Telmex

María Eugenia Mellado
Social Communication of Teléfonos de México:

Once again I make my complaint public. As usual, on October 28, 1996, I received my phone bill for the amount of $764.78 due to 398 additional calls, ten long distance calls, and seven entertainment calls, that I did not make! For this reason, I manifest my dissent again because this phone line is not owned by a radio station or a medical clinic for me to be paying half of my monthly wage for a service I have not used. On October 4, the last time I spoke with you via telephone, you commented that through monitoring it would be investigated if these calls were made from my telephone line. You will be able to make adjustments and check your system, but it is of no use to me, as this is a residential line from which I am sure so many calls have not been made.

You have been making adjustments from August of 1996 and with each phone bill I request a definitive solution, not a response that requires me to pay and then adjustments will be made later. For this reason, I invite you to come any day, at any time, so that you may verify that there is no one to make these types of calls.

On October 30, Irma Martin assisted me at the Department of Clarifications, telling me that there are no previous debts that could be charged in this bill; recognizing that the logged long distance calls were not made, [she] proceeded to cancel them, [but] the "pay per message" calls could not be cancelled.

If you recognize that there are fictitious long distance calls, why don't you recognize the also fictitious "pay per message" calls?

The same thing happens with the additional calls; thereby I don't mean to say that your system is bad, but the month to month increment [that appears] in my bill is larger every time.

The long distance adjustment [I obtained] was for $238.88, leaving a balance of $525.90, which I still consider unjust.

María Laura Hernández.
Congratulates and gives thanks to El Financiero, Profeco and Telmex.

Mr. Director:

This letter is to thank you for your attention to the complaints presented in my letters of July 16, 1996 and September 26 of 1996 referring to calls that were added to my phone bills during June and July for pay per message [calls] (now I know what "P.M." means), of which I have already received the corresponding adjustment thanks to your valuable intervention, without which I know nothing would have been solved. I also wish to thank Profeco's authorities for making it possible for my case to be solved, as well as Telmex for giving prompt solution to my complaint. I congratulate you, Mister Director, since your intervention allows the complaints of many citizens to be heard.

Juana Uribe G.
Arbitrary and unjust increase by Telmex.

Mr. Director:

The increment made by the company Teléfonos de México to [the fees for] telephone line rent is unjust and arbitrary.

My name is María Teresa González Z., my address: Calle 2 de Abril 4, Cuautzingo, municipality of Chalco, State of Mexico.

On September 23 of 1992 I contracted for phone service at the Chalco branch. Starting in February of 1996, several anomalies have occurred, such as charges for calls that were not made, illogical times (with duration of three hours), but the most unjust and arbitrary thing is the increment in the rent by 300 percent.

When I tried to solve this problem with the manager of the branch in Chalco she treated me in a despotic, sharp and tyrannical and prepotent manner. She alleged that I had to pay the phone bill because "computers don't make mistakes", as for the increment in the rent [she claimed that] it was due to the fact that Telmex pays rent for the building where its facilities are, and this was the reason why the increase in the phone service was appropriate.

In September 1996 they called us to ask and to offer the benefits offered by Telmex; they wanted to know if we would remain with its long distance service, [and] I answered no.

The bill corresponding to April of 1997 had a total amount due of 800 pesos. I demand justice because I feel impotent not being able to put a stop to these abuses.

Chronology of the abnormal increment in rent: From February 21 of 1996, when the rent was of 63.14 pesos, this [amount] was increased four pesos every month until it reached the amount of 103.14 [pesos] in December of the same year. From January to March of this year, the increase was of six pesos; the rent increased from 109.14 to 121.14 pesos; but in April the increase was of 13 pesos and, last May, of 26, reaching up to now the amount of 170 pesos.

María Teresa González Zermeño
Complaint against Telmex.

Fernando Lerdo de Tejada
Federal General Attorney for Consumers

Jaime Chico Pardo
General Director of Telmex:

With this, I request your help to put an end to the abuses of Telmex as its charges are excessive and, in the last months, I have had to pay an average of 500 pesos every month.

Teléfonos de México can verify the payments made in July, since they suspended my service for 15 days [due to] lack of payment during the last two months. By the middle of that month I paid the balance. However, in August I have to pay the amount of 560 pesos.

For this reason, I am reluctant to [let them] keep swindling me. We are afraid of denouncing arbitrary actions in the system, when we are not able to be on the streets because of the high index of delinquency, and now these companies proceed in the same way.

I already made a similar complaint before, however I received a telegram from the public relations personnel of Telmex in which they requested my last bills. This company claims to have an avant-garde system because the calls are logged by computer, and in order to make a revision of mistaken collections they request the previous bills.

I am conscious that after this complaint I might have to do without the service since nothing has been done in this respect.

Carlos Ledesma Trujillo
He is not willing to pay Telmex for calls that are not his.

Mr. Director:

During 1996, for several months the amounts due in my phone bills were very high (400 pesos monthly), supposedly due to long distance calls made to the city of Puebla.

In reference to these calls, I requested on several occasions explanations at the telephone number dedicated to this purpose because they were charging me for calls to unknown telephone numbers, as well as other [calls] made in one day to the same line, for the same period of time and cost. With respect to measured service, I was charged for a total of 50 or 80 calls.

When I did not obtain an answer and since the only answer we obtained was that the long distance and measured service calls were those registered for my line by Telmex's computers, in May of 1997, having the option to change long distance service providers, I opted [to change].

From the time when the long distance change was made, it happened that the increment in measured service was exaggerated, currently paying for a total of 150 to 200 additional calls.

We do not agree with this situation because this means that we make around ten daily calls, including weekends, when most people are not in their houses.

As you may see, with this supposed increase in the number of measured service calls, the amounts due in my bills continue to be of approximately 400 to 500 pesos every month.

In view of this, I request a prompt explanation of this situation, [as well as] the verification of the meters [used to count calls] because I don't agree with continuing to pay for calls that are not made from my telephone line.

Adrián R. Espinosa López
He wants to cancel contract with Telcel.

Director of Radiomóvil Dipsa:

I signed a contract with Cellular Center in the month of January of 1998. The telephone that [was provided] began having problems from [the time it was] new; it didn't work, no incoming or outgoing calls, etc.

In September I took [the phone] to a Motorola service center; it was there for a while, they gave it back to me, and later it failed again. In October and December the same thing [happened], it failed again; at this point, I had previously gone to a service center for Telcel customers, as well as to the distributor; however, in Telcel they only told me that it was not their problem, that I should buy another telephone. At the Distribuidora Centro Celular they told me that it was no use for me to leave the phone there because they would take it to Motorola and it would be the same problem.

I went several times to Telcel's Customer Service Center, and nothing [happened], they didn't even want to receive my letters. I communicated with Telcel through the Internet, however I never received a call back. I stopped paying in January of this year since I didn't have service, but somebody in Telcel called me to tell me that I had a debt with them. This happened in two occasions, the first [person] was definitively rude, without any education and arrogant; I was very angry.

They transferred my problem to a law office which is in charge of communicating with me and requesting me to pay. It is also necessary to consider that the personnel of this office that has contacted me has been very kind; they are people willing to, at least, listen to the problem I had.

Beginning in December, my cellular phone finally stopped working; I no longer took it to Motorola [because it would have been] the same thing. I agree that from January to this date I have not paid, [I just paid] the monthly rent because my telephone doesn't work. I think that this is unjust, since from September my phone has been broken most of the time (seemingly under warranty). But it is no use, I would really want to cancel the contract; I don't have service, I cannot use the telephone, and I do have to pay, that is too unjust. I went to Profeco, since Telcel never wanted to listen to me, and maybe there we can reach an agreement that will benefit both parties.

Carlos A. Ortiz Morales
Thankful for the attention.

Mr. Director:

I would appreciate your allowing me to openly [express my] gratitude for the extraordinary service that you offer us, the readers of *El Financiero*, through the column "Espacio del Lector".

On Friday March 26, 1999 you published my complaint against "undue collections [made] by Alestra." Consequently, I was invited by the Consumer's Federal Attorney's (PFC) office to appear before their Department of Counseling and Complaints "[. . .] on May 6", where they proceeded to file my complaint, [and] set up a "reconciliatory hearing" for May 21 at [2 p.m.].

Finally, on May 21, with kindness and recognizable diligence, the PFC's representative, Ms. Petra Salazar González, described to me all that was done so that Alestra [could be] held subject to the law, under which it had failed to act, and [could] avoid being sanctioned in accordance with the Federal Law of Consumer Protection.

In this way, I would like to publicly recognize the services [provided by] the "Espacio del Lector", the attention of the Consumer's Federal Attorney's office, and the diligent guidance of Ms. Petra Salazar González, so that El Financiero's communicative quality and the disposition of government administrators to respond to the rights demanded by "the citizens"–required in any truly national coexistence (we all are consumers)–are recognized.

Not all the citizens find news media to [express their] protests [through] and not all the news media are interested [in doing so].

Guillermo García Rincón
Requests a refund from Telmex.

Mr. Director:

Since the beginning of the month of August I requested of Telmex the package "Prodigy Plus", but, according to the distributor of Acer, they did not have the equipment.

Even though I have been patient regarding the date for delivery, unfortunately they have not fulfilled [the contract].

On August 29 I told them that I wanted to cancel the order and I sent a fax to Telmex addressed to Mr. Gerardo Hernández, ten times, but he alleges that he didn't receive it!

The only thing I want is for them to reimburse me what they have already charged to my credit card and [to be able to] forget this matter.

Rafael Zaga Hadid
Telmex's Prodigy Internet doesn't fulfill its commitments.

Mr. Director:

On October 28, 1999 I had the audacity of requesting of Telmex's "Prodigy Internet" a Compaq computer. To do this, I was required to make a payment with my Bancomer credit card number 4555 0001 2773 9069; Ms. Leticia Mercado, the person that assisted me, informed me that the equipment would arrive in four or five weeks.

On December 4 I called the same person again to ask her when would they deliver my computer, and she replied that [it would be] on the 6th; that didn't happen. So, on December 15 I called Mr. Raúl Flores, who indicated to me that my request for the purchase of the aforementioned equipment could not be found, and that I would need to send him my credit card statement for my request to be attended to. Since I have not received my [credit card statement] yet, I requested it from Mexico City via fax; a charge appeared in the statement for a thousand 840 pesos dated October 31.

By virtue of the above-mentioned facts, I would like to express my deepest discontent with Prodigy Internet of Telmex, which doesn't fulfill its contracted commitments, and I would like to request that the authorities conduct a rigorous audit because it is not possible for [this company] to collect monies without registering where [the payments] come from. The [above-mentioned] company [should] put itself in [the consumer’s] place, since the charge they made accrued interest against me, without my having received the equipment.

Hugo Rodríguez Saldaña, of Zihuatanejo, Guerrero
So much abuse is not possible.

Mr. Director:

On November 24 I acquired a cellular telephone Nokia, model 5120, number 54344901 at a Telcel service center; its advertisement is very good, but not so its attitude and service, as I was able to prove.

As a consumer I felt defenseless and at a disadvantage against the consumption policies of big companies, like "Your friend of Telcel", which, if they are your friends, why would you need enemies?

On February 3, 1999 I sent a fax to request the cancellation of the service called "Rescatel Plus" (which I am currently being charged for).

In the month of January my cellular phone was stolen; I applied for a restitution, but I found out that it would be more expensive [for me] to use the insurance than to buy it at any distribution center. For this reason, on January 12, 2000 I also requested the cancellation of the "insurance" and "Rescatel Plus" (the insurance was not cancelled until March).

On February 10, 2000 I requested for my lease plan to be changed, from the "practical" plan to the "classic" one that I contracted originally, and in December it appeared on my statement that they had made [the change] (perhaps because this plan was more expensive). On March 11 I made, for the second time, a petition to change my lease plan, however they paid no attention.

So much abuse is not possible, without anybody doing something. The employees are inefficient: what they do is to push away [customers], instead of keeping [them] and providing good service; their managers should care and provide solutions to these anomalies.

This is my last of 18 [months] of martyrdom, and I don't want any [further] relationship with this company, which I sued before Profeco (file: 207/2000/819, not having been present at any of the hearings) so that they would reimburse me the money that corresponds to the [services] that I never used, never contracted, or that I appropriately canceled. Hoping that this letter is useful to the readers of this newspaper.

Pedro Fragoso Diosdado
He complains against Nextel.

Mr. Director:

On August 25, 1999 we contracted the services of Nextel of Mexico (two telephones), but from that day on the radio reception and emission has not been clear nor continuous, so we began reporting these anomalies verbally to that company, but we never received a call or a visit on their behalf to solve the problem.

Starting on August 23, 2000 they began giving us report numbers (135328) so that we could follow up with our problem; after eight days of not obtaining an answer and as a response to an increase in the failures of the telephones, we called again on August 31, [when they] gave us the report number 141456, with which they sent a technician by the middle of September, who indicated that probably the problem was the building where we are located.

When Nextel's employee left he said that he would call us or he would come later to give us the solution, but until December 28 he had not visited us and, in the numerous calls we made later on, they told us that they will no longer give us another report number, but rather they will include them under the last number they assigned us (the 141456), even when the reception problems are more pronounced every time.

We called them again, but this time to complain about an operator-handled call charge that was included in our monthly invoice for [an amount of] 160 pesos plus tax, which they are billing us for since last October, even when we were sent a cancellation form for this service in June (not because we had requested it, but because they activated it automatically).

We told María Araiza that we had already paid our bill for the month of November, but we didn't include the 160 pesos plus tax because we did not acknowledge this debt; in reprisal, they disconnected the service, both radio and telephony, last December 27.

Besides, Ms. Araiza told us that on her [computer] screen she had the information that the technician had provided about his visit to our home, and that he said that in our area, Lindavista, they did not have a hundred percent coverage, and that was the reason for our reception problems, and that they would have to install a "new site in Politecnico [avenue]", and she didn't know when this could happen.
In view of the bad service and billing anomalies of Nextel we decided to end the contract that unites us to them, [but they] indicated that our contract won't conclude for two more months and we would have to pay rent every month, a thousand 700 pesos, which we don't agree with.

Arturo Solís Sánchez.
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