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Relations Between Regulation, Competition Policy and Consumer Protection in Telecommunications, Electricity and Water Supply

Gesner de Oliveira

Sergio Goldbaum

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RELATIONS BETWEEN REGULATION, COMPETITION POLICY AND CONSUMER PROTECTION IN TELECOMMUNICATIONS, ELECTRICITY AND WATER SUPPLY†

*Gesner de Oliveira**

*Sérgio Goldbaum***

I. INTRODUCTION

The purpose of this Article is to discuss the relationship between regulation, competition policy and consumer protection in three key sectors of Brazil's infrastructure: Telecommunications, electricity and water supply. A study of the literature points to two general principles. First, the need for consumer protection depends on the "degree of sovereignty" enjoyed by consumers, defined in terms of the cost of consumer organization, the ability

† This Article is based on a research report with the same title by Gesner de Oliveira, produced with the collaboration of Rafael Cunha Rezende and published by Núcleo de Pesquisas e Publicações. *See Oliveira, infra* note 1.

* Ph.D. in Economics, University of California, Berkley; Professor of Economics, Getúlio Vargas Foundation, São Paulo, Brazil; Consultant, Tendências Consultoria Integrada.

** Ph.D. student, Getúlio Vargas Foundation, São Paulo, Brazil; Professor, Escola Superior de Propaganda e Marketing, São Paulo, Brazil.

of consumers to evaluate services and the level of competition in each sector.¹ Second, the less sovereignty consumers enjoy, the more consumer protection institutions are involved with regulatory agencies.² The evidence for the Brazilian case apparently corroborates these points. In addition, it is important to stress that consumer complaints in regulated sectors seem to have increased more intensely than in other sectors.³

This Article is divided into three sections. Section II presents theoretical elements and aspects of the relations between regulation, competition policy and consumer protection evidenced by international experience. Section III analyzes the Brazilian experience, in particular, the available statistics on consumer complaints about telecommunications, electricity and water supply, submitted to Brazilian consumer protection agencies during the 1990's. Section IV points to possible configurations of the institutional relations between competition policy, regulation and consumer protection, showing how the existing configuration of these areas in the three infrastructure sectors discussed confirms that the theoretical framework proposed has reasonable predictive power.

II. CONSUMER PROTECTION: THEORETICAL ELEMENTS AND ASPECTS OF INTERNATIONAL EXPERIENCE

This Section presents theoretical elements and aspects of international experience in consumer protection and their relations with competition policy and regulation. Historically speaking, the emergence of consumer protection policies was associated with: (i) the development of mass production and consumption, which led to impersonal consumption relations; (ii) rising incomes, which drove an increase in consumption of technology-intensive consumer durables; and (iii) the expansion of

1. Neil W. Averitt & Robert H. Lande, *Consumer Sovereignty: A Theory of Antitrust and Consumer Protection Law*, 65 ANTITRUST L.J. 713 (1997). See also Gesner de Oliveira, *A Articulação Entre Regulação, Defesa da Concorrência e Proteção do Consumidor nos Setores de Telecomunicações, Energia Elétrica E Saneamento Básico*, 54 RELATÓRIO DE PESQUISA 1 (2001).

2. See Oliveira, *supra* note 1, at 123.

3. *Id.* at 107-08.

services.⁴ In these categories, evaluation of product quality, comprehension of instructions for use and infrequent commercial relations are factors that have heightened the importance of institutional mechanisms for consumer protection.

Among the developed countries of the world, consumer protection policies and institutions emerged during the 1960's and 1970's. The United States, for example, saw the rise of a "consumerist" movement led by charismatic personalities like Ralph Nader. Activists known as Nader's Raiders succeeded in obliging auto manufacturers to fit all vehicles with safety equipment.⁵ The belated appearance of consumer protection policies in Latin American countries is attributed by Eduardo Engel to the political situation prevailing in these countries throughout most of the century.⁶ The ideological right, which was hegemonic in much of the region during the period, was too beholden to large, powerful corporations to impose consumer protection, while the center and left rejected the idea of market freedom.⁷

Engel divides consumer protection activities into two kinds: (i) consumer protection policy, properly speaking, which is designed to modify the status quo in terms of the information available to consumers; and (ii) consumer promotion, geared toward education and the creation of institutions and associations for consumer protection advocacy.⁸ Information of relevance to consumer protection is disseminated by the media and special-interest magazines, although sometimes there are conflicts between the information they publish and the interests of their sponsors. Compensation is a powerful institutional mechanism for consumer promotion, but the possibility of obtaining

4. Eduardo Engel, *Beyond the Basics of Consumer Protection*, in REGULATORY POLICIES AND REFORM: A COMPARATIVE PERSPECTIVE 131 (Claudio R. Frischtak ed., 1995). See also Gisela Black Taschner, *Proteção ao Consumidor: Um Estudo Comparativo Internacional*, 1 RELATÓRIO DE PESQUISA 1, 4, 28-32 (1995).

5. Taschner, *supra* note 4, at 28-32.

6. *Id.*

7. *Id.* at 137.

8. *Id.* at 131. See also Eduardo Engel, *The Basics of Consumer Protection: Principles and Policies*, in REGULATORY POLICIES AND REFORM: A COMPARATIVE PERSPECTIVE 104 (Claudio R. Frischtak ed., 1995).

compensation is frequently limited by the high transaction cost of litigation.

Engel subdivides consumer protection and promotion policies into two main types: (i) policies introduced by government, either through public consumer protection agencies or through measures designed to reduce the transaction cost of litigation, or again through the creation of alternative mechanisms for dispute resolution; and (ii) private-sector initiatives such as the creation of customer service centers by corporations and consumer affairs columns in the media.⁹

Insofar as consumer protection and promotion policies oblige business organizations to comply with certain quality standards, the existence of consumers who actively advocate respect for their rights and institutional mechanisms that provide for such activism reduces the need for more strenuous regulatory intervention.¹⁰ With regard to trade liberalization and competition, it should be stressed that although arguments for consumer protection have often been used as a form of non-tariff barrier,¹¹ trade liberalization and increasingly intense competition in many countries have forced governments and exporters to adopt stricter consumer protection policies. This is either because local producers find themselves competing with imported products made to stricter quality standards or because local consumers gain increasing access to technology-intensive products and experience greater difficulty in obtaining information about these products, as well as compensation when appropriate.¹² Lastly, with regard to the competitiveness of local industry, although local producers often complain that consumer protection laws will make their products more expensive and therefore less competitive, the existence of organized consumers stimulates local producers to comply with higher quality standards, thus enhancing their competitiveness in more demanding markets and reducing the initial investment required to launch a product abroad.¹³

9. Engel, *supra* note 4, at 133-34.

10. *Id.* at 134.

11. *Id.* at 134-35.

12. *Id.*

13. *Id.* at 136.

Neil W. Averitt and Robert H. Lande have analyzed the relationship between antitrust and consumer protection law.¹⁴ In their understanding, competition policy and consumer protection share a common goal: They are both intended to facilitate the exercise of what they call "consumer sovereignty," or effective consumer choice.¹⁵ The authors define "consumer sovereignty" as a state in which consumers can freely take decisions based on their individual interests and in which markets will respond to the collective effect of those decisions.¹⁶ Competition policy tends to provide consumers with a competitive range of choices, while consumer protection tends to ensure that consumers can effectively choose among the options available without their critical faculties being hampered by such violations as deception or omission of material information.¹⁷

Both competition policy and consumer protection are theoretically justified on the basis of the possible occurrence of "market failures," such as abuse of economic power, asymmetrical information, transaction costs, externalities, entry barriers and natural monopolies.¹⁸ The authors then subdivide market failures into two categories: (i) those external to consumer relations, comprised of restrictions to the range of consumer choices which can be corrected within the sphere of competition policy; and (ii) those internal to consumer relations, comprised of restrictions to the consumer's ability to choose freely from among the options available which can be corrected within the sphere of consumer protection.¹⁹

Thus, market imperfections such as imperfect information and irrecoverable entry costs, or anti-competitive conduct such as price or reputation predation, price fixing, horizontal restrictions, mergers and vertical restrictions, fall within the exclusive remit of competition policy. On the other hand, the sphere of consumer protection covers cases involving complaints relating to product features, warranties and contractual clauses associated

14. Averitt & Lande, *supra* note 1, at 713.

15. *Id.*

16. *Id.* at 722.

17. *Id.* at 714.

18. *Id.*

19. *Id.*

with market failures whose impact harms four types of consumer: (i) those whose freedom of choice is subject to some form of coercion; (ii) "vulnerable" groups (such as children); (iii) victims of misleading or incomplete information; and (iv) consumers who have to deal with information that may be difficult to understand.²⁰ There are also certain "hybrid" cases that involve constraints on both consumer choice and the effectiveness of choosing among the existing options. This is the case, for example, with conduct that results in higher search costs, tied sales or resale price fixing.

Averitt and Lande therefore propose a "unified" theory with some practical implications.²¹ First, the construction of a relevant theoretical framework would help the parties to match a specific issue with the appropriate legal theory.²² Second, close functional relationships between action to conserve options and action to preserve freedom of choice among existing options would show why the Federal Trade Commission ("FTC") was created and why its status should remain unchanged.²³ Third, a unified theory would facilitate the discussion of issues that do not involve only price competition, thus making competition policy more sensitive to non-price competition.²⁴ This is especially important, for example, in the case of mergers between media organizations.

Averitt and Lande's justification for the connection between competition policy and consumer protection is of particular interest to the discussion developed here. The authors advocate combination of both activities in a single agency, in that antitrust and consumer protection functions *can* and *should* work together to safeguard the exercise of consumer sovereignty.²⁵ According to Averitt and Lande, the problems of competition policy and consumer protection are of the same nature, and in practice the in-

20. Averitt & Lande, *supra* note 1, at 733.

21. *Id.* at 744.

22. *Id.*

23. *Id.* at 747. It should be stressed, however, that unlike the FTC, the Antitrust Division of the U.S. Department of Justice specializes in competition policy and *does not* intervene in matters pertaining to consumer protection. *Id.*

24. *Id.* at 745.

25. Averitt & Lande, *supra* note 1, at 756.

terests of both functions converge.²⁶ As will be demonstrated in Section IV, we take the opposite view: our understanding is that although both functions stimulate each other reciprocally,²⁷ there are not necessarily any scope economies to be achieved by combining them. Thus, there is no justification for submitting them to common routines. Averitt and Lande anticipate the approach adopted in this discussion, noting that it is highly tempting to think about these functions as being very different and related only at the most general and abstract level inasmuch as both bureaus aim in the final analysis to improve the well-being of consumers.²⁸

Based on the observation that the routines remain independent even where the same agency has jurisdiction over competition policy and consumer protection,²⁹ we maintain our opposition to Averitt and Lande, albeit noting that their approach provides important arguments in favor of giving consumer protection agencies more influence over the decisions taken by competition agencies.

In Brazil, the problem of how consumer protection, regulation and competition policy interrelate is illustrated by José R.L. Lopes.³⁰ Lopes is in charge of consumer affairs at the National Petroleum Agency ("ANP"), which regulates the oil industry. In an article published by *O Estado de São Paulo*, he criticized the idea of creating a National Competition Agency ("ANC") on the grounds that it would not give priority to consumer protection.³¹ According to the article, "consumer protection is the poor cousin of economic law."³² He goes on to argue that the proposed creation of the ANC "merely shows that the debate remains focused on how to defend capital against

26. *Id.*

27. See Engel, *supra* note 4, at 106.

28. Averitt & Lande, *supra* note 1, at 756.

29. For example, the FTC in the United States and the Australian Competition and Consumer Commission.

30. José Reinaldo L. Lopes is a professor at the Law School of the University of Sao Paulo and coordinator of Consumer Relations of the National Petroleum Agency. See José Reinaldo L. Lopes, *Quem Defenderá o Consumidor?*, O ESTADO DE S. PAULO, Jan. 31, 2001, at 2, available at <http://www.estado.com.br/editorius/2001/01/31/eco914.html>.

31. *Id.*

32. *Id.*

capital itself through a committee of big business. Little is said about the consumer. Only capital seems to matter."³³

Lopes criticizes the draft bill proposing to create the ANC because it does not contemplate inclusion of a Collegiate Executive or Consultative Council for Consumer Protection,³⁴ and because the functions of the collegiate body are confined to administrative matters, with the sole exception of Clause II,³⁵ whose generality is not resolved by any other article in the draft bill. Furthermore, Lopes does not see what role can be played by a federal consumer protection agency if consumer law is constituted within the judicial arena, which pertains to the state sphere in Brazil's federal institutional framework.³⁶ With regard to regulation, Lopes asks how the ANC would relate to the regulatory agencies:

All the regulatory agencies created so far are restricted to a single economic sector. The new agency's jurisdiction does not pertain to any sector in particular. What role will it play, then, given that it will be suited only to oversee mass consumption in non-regulated sectors? It must be borne in mind that the existing agencies are not consumer protection bureaus, although they are expected to take the consumer's interests into account.³⁷

Lastly, Lopes warns that linking the consumer protection system to a new Competition Agency could relegate consumer protection to a secondary role.³⁸ According to his article, several cases have been submitted to the Administrative Council for Economic Defense ("CADE"), an agency of the Justice Ministry, on the initiative of consumers, but CADE's decisions have never been directly favorable to them.³⁹ Lopes recalls a lawsuit heard in 1998 in which a consumer succeeded in winning a judicial annulment of a contractual clause deemed abusive.⁴⁰ CADE also investigated the case but decided to focus on two aspects alone: (i) whether the economic agent's practice in-

33. *Id.*

34. *Id.*

35. *Id.*

36. Lopes, *supra* note 30, at 2.

37. *Id.*

38. *Id.*

39. *Id.*

40. *Id.*

terfered with competition; and (ii) whether its price hikes had actually or potentially eliminated competitors.⁴¹ Lopes concludes that the verdict went against the consumer.⁴²

III. EVOLUTION OF CONSUMER PROTECTION IN THE NINETIES: COMPLAINTS AGAINST ELECTRICITY, WATER SUPPLY AND TELECOMMUNICATIONS UTILITIES

This Section discusses recent trends in complaints submitted to consumer protection agencies with a view to examining the peculiarities of regulated industries and in particular the selected infrastructure sectors.

A. *The Brazilian Consumer Protection System*

The Brazilian consumer protection system was built up under pressure from social movements and broad advocacy of increased access to the courts during the late 1970's and early 1980's as part of the nation's return to democracy after a long period of military rule.⁴³ The key milestones in this process were laws creating small claims tribunals,⁴⁴ public civil suits and the Consumer Defense Code.⁴⁵ In 1997, the National Consumer Protection System ("SNDC") was created by Decree 2.181,⁴⁶ comprising the Economic Law Department ("SDE") of the Justice Ministry through its Consumer Protection & Defense Department ("DPDC") and other agencies of the federal, state and municipal governments, as well as civil associations of consumer activists.⁴⁷ Among the powers of the DPDC set out in Article 3 of Decree 2.181, it is worth citing Clause XII: "[C]alling upon the Economic Law Department to enter into agreements and memoranda of

41. *Id.*

42. Lopes, *supra* note 30, at 2.

43. See Taschner, *supra* note 4, at 36-45.

44. Lei No. 9.099, 26 de Setembro de 1995, D.O.U. de 27.09.1995.

45. CÓDIGO DE PROTEÇÃO E DEFESA DO CONSUMIDOR [C.D.C.] Lei No. 8.078, de 11 Setembro de 1997, D.O.U. de 12.09.1997.

46. Decreto No. 2.181, de 20 de Março de 1997, D.O.U. de 21.03.1997.

47. *Id.*

understanding to bring about a change of conduct.”⁴⁸ The Consumer Defense Code established a National Consumer Relations Policy⁴⁹ in which low-income consumers are guaranteed the right to full legal assistance free of charge through small claims tribunals (now termed special civil courts).⁵⁰ This Article also called for the creation of special police forces and public prosecutors for consumer protection, as well as fostering the organization of consumer associations.⁵¹ Other items of the Consumer Defense Code worth mentioning are: (i) exemptions from court fees and stamp duties for low-income consumers;⁵² (ii) incentives for civil associations to seek compensation for consumers, again with exemption from legal charges;⁵³ (iii) government’s duty to seek judicial review of cases that involve collective or diffuse interests;⁵⁴ and (iv) importer liability for accidents arising from imported goods.⁵⁵ Besides the DPDC, the SNDC also comprises agencies of all three tiers of government and civil associations. Probably the most important of the latter are the twenty-seven state and more than 500 municipal bureaus of *Coordenadoria de Proteção e Defesa do Consumidor* (“Procon”).

In São Paulo State, *Fundação Procon-SP* (“Procon-SP”) was devised in 1976 through Decree 7.890, which created the State Consumer Protection System.⁵⁶ In 1982, Procon-SP was restructured through the activities of the Executive Group for Consumer Protection.⁵⁷ The São Paulo State Public Prosecutor’s Office set up a Consumer Protection Department in 1983, initially to operate in col-

48. *Id.* cl. XII.

49. C.D.C. arts. 4-5.

50. *Id.* art. 5, cl. I & IV.

51. *Id.* art. 87.

52. *Id.* art. 81.

53. *Id.* art. 12.

54. *Id.* § 1978a.

55. C.D.C. § 1978b.

56. Decreto No. 7.890 de 6 de Maio de 1976, D.O.E.S.P. de 07.05.1976.

57. For a brief history of the key milestones in the emergence of the Brazilian consumer protection system, see *Breve Histórico da Proteção ao Consumidor*, at <http://www.procon.sp.gov.br/institucionalhistorico.htm> (last visited Nov. 6, 2001) [hereinafter *Histórico*]. See also Oliveira, *supra* note 1, at 99.

laboration with Procon.⁵⁸ This department was expanded in 1985, entering into agreements with municipal governments throughout the State and with civil associations.⁵⁹ In 1987, an entirely new department of the São Paulo State Government was set up to handle consumer affairs, and this in turn created an Inspection Service, now known as the Adjunct Directorate for Inspection & Consumer Protection.⁶⁰

In 1991, Procon-SP changed its name to the Division for Consumer Protection & Defense and was subordinated to the São Paulo State Department of Justice & Defense of Citizenship.⁶¹ Finally, Law 9.192⁶² and Decree 41.170⁶³ transformed Fundação Procon-SP into a public-law entity funded out of the state budget, together with donations, contributions, internally generated revenue and fines.

B. Consumer Protection In Telecommunications, Electricity & Water Supply

Figure 1 is a flow chart outlining the process whereby Procon-SP handles consumer queries and complaints. Any citizen can complain to the agency or request information.⁶⁴ On receiving an application from a consumer through one of its citizens' advice bureaus (*Pontos de Atendimento*), Procon-SP contacts the supplier of the product or service concerned.⁶⁵ The supplier may or may not accept the complaint.⁶⁶ If accepted, the complaint is discharged and not kept on file in Procon-SP's archive of justified complaints.⁶⁷ If the supplier does not accept the complaint, the case is investigated by one of Procon-SP's specialized units, of which there are six: (i) food; (ii) hous-

58. See *Histórico*, *supra* note 57.

59. *Id.*

60. *Id.*

61. *Id.*

62. Lei No. 9.192, de 23 de Novembro de 1995, D.O.E.S.P. de 24.09.1996.

63. Decreto No. 41.170, de 23 de Setembro de 1996; D.O.E.S.P. de 24.09.1996. See also Oliveira, *supra* note 1, at 99.

64. See Oliveira, *supra* note 1, at 137-38.

65. *Id.*

66. *Id.*

67. *Id.*

ing; (iii) health; (iv) financial affairs; (v) products; and (vi) services (public and private).⁶⁸

On completion of the investigation, the parties are summoned to a reconciliation hearing.⁶⁹ If the complaint is resolved at this hearing, the case is filed away under "satisfied complaints."⁷⁰ If not, the case is classified as an "unsatisfied complaint" and depending on the value attributed to it may be directly submitted to a special civil court (i.e., a small claims tribunal) or the complainant may be advised to initiate legal proceedings.⁷¹ In addition, Procon-SP may enter an official complaint against the supplier in its capacity as consumer protection agency.⁷² If this is the case, the official complaint is forwarded to the inspection service, which then collaborates with the agency's technical staff to produce an opinion or carry out an inspection, which may result in a fine.⁷³ Procon-SP also conducts regular analyses of complaints against specific industries or sectors.⁷⁴ These are the basis for preventive actions that include the formation of working groups to discuss quality standards and other aspects of the supply of goods and services.⁷⁵ A successful example is the tourism industry, which has standardized the forms and procedures used by travel agents in order to avoid recurrent problems with tourism operations.⁷⁶

68. *Id.*

69. *Id.*

70. *See* Oliveira, *supra* note 1, at 137-38.

71. *Id.*

72. *Id.*

73. *Id.*

74. *Id.*

75. *Id.*

76. *See* Oliveira, *supra* note 1, at 137-38.

Figure 1: Flow Chart Procon-SP⁷⁷

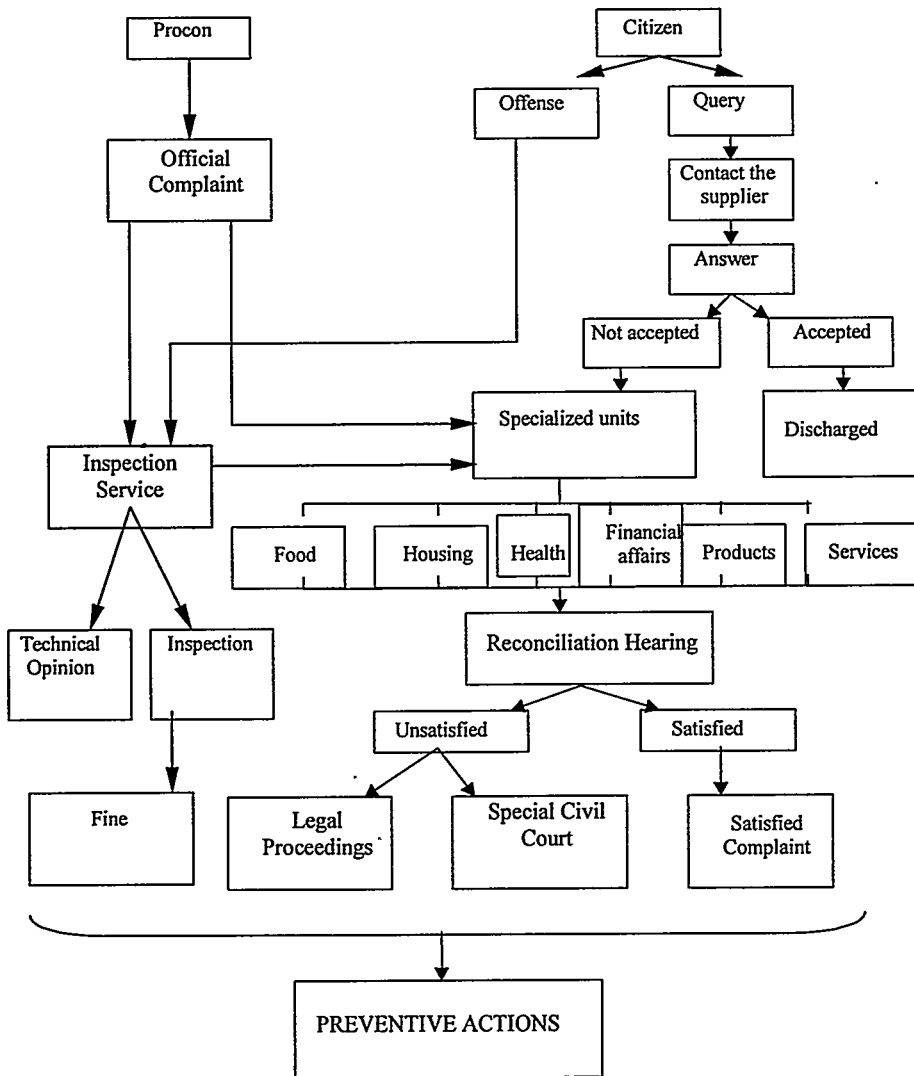


Figure 2 shows the total number of queries and complaints submitted to Procon-SP between 1977 and September 2000.⁷⁸ The numbers are grouped into two categories, queries (requests for information) and complaints. Complaints are in fact queries that have not been resolved directly by the service center or through corre-

77. This chart was produced with the assistance of Maria Isabel Vergueiro Pupo, a member of the consumer protection technical staff at Procon-SP.

78. *Id.*

spondence with the supplier and have therefore been forwarded to technical staff for further investigation.⁷⁹

It can be seen that the aggregation method has changed during the period. For example, until 1995 "queries" included "direct service and correspondence issued," while between 1996 and 2000 these activities, sometimes referred to as "M1A Letters," were classified under "complaints." Nevertheless, the total number of queries and complaints increased noticeably at two points, subsequent to 1986 and in 1994, probably reflecting the institutional changes described in this Article.

Figure 2: Services Provided by Procon-SP, 1977-2000

YEAR	QUERIES	COMPLAINTS	TOTAL
1977	272	1,270	1,542
1978	462	2,031	2,493
1979	2,509	3,704	6,213
1980	4,326	3,921	8,247
1981	3,528	5,334	8,862
1982	9,893	6,114	16,007
1983	14,756	5,913	20,669
1984	23,853	3,725	27,578
1985	40,362	4,487	44,849
1986	113,396	11,301	124,697
1987	118,445	6,559	125,004
1988	96,085	6,458	102,543
1989	132,520	8,496	141,016
1990	104,988	7,908	112,896
1991	115,407	7,679	123,086
1992	180,801	11,320	192,121
1993	160,741	11,506	172,247
1994	256,631	12,826	269,457
1995	279,419	11,182	290,601
1996*	247,381	55,447	302,828
1997	184,382	53,942	238,324
1998	287,870	80,564	368,434
1999	235,463	54,411	289,874
2000**	231,688	53,539	285,227

*Data for the period 1996-2000 include queries to the list of suppliers and price surveys. ** Breakdown of queries/complaints obtained by extrapolation of data for January-September 2000.

79. A detailed chart summarizing the queries and complaints submitted to Procon-SP will be found in Appendix A.1.

Article 44 of the Consumer Defense Code states that consumer protection agencies are obliged to publish an annual list of justified complaints.⁸⁰ This obligation has been discharged since 1992 through publication of the list in the São Paulo State Daily Register (*Diário Oficial do Estado de São Paulo*), although in 1992 the document as published contained only data for March to December. The list, officially termed a *Cadastro*, presents general information about the activities of consumer protection services as well as details of justified complaints, grouped according to the companies involved.⁸¹ Both queries and complaints are also broken down into six categories: (i) food; (ii) health; (iii) housing; (iv) products; (v) services; and (vi) financial affairs.⁸² Additionally, in certain years the document includes items classified as: "External to Procon," meaning cases forwarded to other agencies; "Inspection," referring to the involvement of inspectors in the investigation; and "CAD/PESQ," indicating not a complaint as such, but consultation of Procon-SP's records.⁸³

Figure 3: Procon-SP—Services Provided by Area, 1994-1999

AREAS	1994	1995	1996	1997	1998	1999	2000
FOOD	2.649	2.193	1.374	1.353	1.902	692	788
HEALTH	22.088	11.667	23.374	15.401	18.376	16.244	17.771
HOUSING	115.588	114.537	54.015	25.090	23.336	13.344	11.660
PRODUCTS	34.506	44.760	47.853	43.672	57.863	34.864	42.487
SERVICES	46.943	58.641	66.159	58.140	113.666	115.299	93.767
FINANCIAL AFFAIRS	22.965	23.836	25.290	24.853	62.576	49.951	44.437
INSPECTION	321	321	343	228	329	0	
EXTERNAL TO PROCON	24.396	34.646	32.451	33.726	56.835	67.641	74.317
CAD-PESQ	0	0	51.969	35.861	33.551	0	
TOTAL	269.456	290.601	302.828	238.324	368.434	298.035	285.227

80. C.D.C. art. 44. "Justified complaints" refers to complaints that were not resolved directly by citizens' advice bureaus or through correspondence with suppliers, and were therefore forwarded to the technical areas of Procon-SP. A flow chart showing the procedures for handling consumer queries and complaints at Procon-SP can be found in Figure 1.

81. Fundação de Proteção e Defesa do Consumidor, CADASTRO DE RECLAMAÇÕES FUNDAMENTADAS, 2000, at 26, 43, 57-59, 80, 126, 141-42, 150, available at <http://www.procon.sp.gov.br> (last visited Nov. 4, 2001) [hereinafter CADASTRO 2000].

82. *Id.*

83. *Id.* at 104.

Figure 3 shows services rendered by area in the period 1994-1999.⁸⁴ Figure 4 shows the evolution of these services in percentage terms by sector in the period 1994-1999, excluding items classified as "External to Procon," "Inspection" and "CAD/PESQ." It can be seen that a decrease in the number of queries and justified complaints relating to "Housing" was more than offset by an increase in the category "Services" and, albeit to a lesser extent, in "Financial Affairs." Justified complaints relating to telecommunications, electricity and water supply are included in the category "Services."⁸⁵

84. Fundação de Proteção e Defesa do Consumidor, CADASTRO DE RECLAMAÇÕES FUNDAMENTADAS, 1994, at 27, 52, 119, 133, *available at* <http://www.procon.sp.gov.br> (last visited Nov. 4, 2001) [hereinafter CADASTRO 1994]; Fundação de Proteção e Defesa do Consumidor, CADASTRO DE RECLAMAÇÕES FUNDAMENTADAS, 1995, at 54, 64, 153, 173, *available at* <http://www.procon.sp.gov.br> (last visited Nov. 4, 2001) [hereinafter CADASTRO 1995]; Fundação de Proteção e Defesa do Consumidor, CADASTRO DE RECLAMAÇÕES FUNDAMENTADAS, 1996, at 100, 237, 266, *available at* <http://www.procon.sp.gov.br> (last visited Nov. 4, 2001) [hereinafter CADASTRO 1996]; Fundação de Proteção e Defesa do Consumidor, CADASTRO DE RECLAMAÇÕES FUNDAMENTADAS, 1997, at 75, 184, 206, *available at* <http://www.procon.sp.gov.br> (last visited Nov. 4, 2001) [hereinafter CADASTRO 1997]; Fundação de Proteção e Defesa do Consumidor, CADASTRO DE RECLAMAÇÕES FUNDAMENTADAS, 1998, at 35, 106, 107, 249, 281, *available at* <http://www.procon.sp.gov.br> (last visited Nov. 4, 2001) [hereinafter CADASTRO 1998]; Fundação de Proteção e Defesa do Consumidor, CADASTRO DE RECLAMAÇÕES FUNDAMENTADAS, 1999, at 36, 37, 60, 102-03, 245-46, 276-77, *available at* <http://www.procon.sp.gov.br> (last visited Nov. 4, 2001) [hereinafter CADASTRO 1999].

85. See CADASTRO 1994-1999, *supra* note 81.

Figure 4: Procon-SP—Services Provided by Sector of Activity, 1992-1999

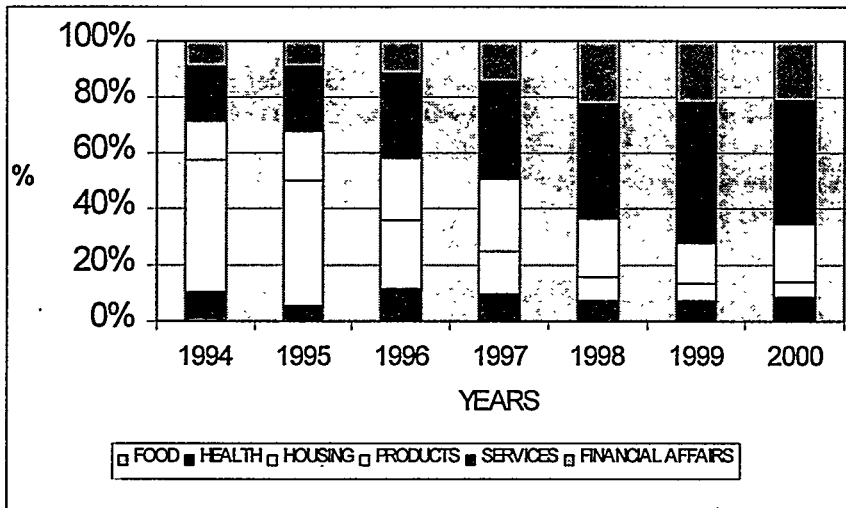


Figure 5 shows the data for justified complaints relating to these three infrastructure sectors in the period 1992-1999.⁸⁶ In the case of telecommunications, the research project focused on fixed-line and wireless telephony services.⁸⁷ The same table compares justified complaints relating to all three sectors with complaints relating to other services and with total complaints.

86. Fundação de Proteção e Defesa do Consumidor, CADASTRO DE RECLAMAÇÕES FUNDAMENTADAS, 1992, at 128, available at <http://www.procon.sp.gov.br> (last visited Nov. 6, 2001) [hereinafter CADASTRO 1992]; Fundação de Proteção e Defesa do Consumidor, CADASTRO DE RECLAMAÇÕES FUNDAMENTADAS, 1993, at 54, 120, 133, available at <http://www.procon.sp.gov.br> (last visited Nov. 6, 2001) [hereinafter CADASTRO 1993]. See also CADASTRO 1994-1999, *supra* note 84. A full breakdown of justified complaints by company and by type of complaint can also be found in Oliveira, *supra* note 1, at 139-44.

87. See CADASTRO 1992-1993, *supra* note 86; CADASTRO 1994-1999, *supra* note 84.

Figure 5: Procon-SP — Total Justified Complaints Relating to Electricity, Telecommunications (Telephony) & Water Supply, by Company, 1992-1999

YEAR	TOTAL COMPLAINTS BY SECTOR			TOTAL
	ELECTRIC (A)	TELECOM (B)	WATER (C)	A + B + C (D)
1992	76	198	320	594
1993	261	461	1,299	2,021
1994	114	412	525	1,051
1995	10	62	122	194
1996	77	292	347	716
1997	48	396	421	865
1998	104	1,987	845	2,936
1999	268	10,577	1,414	12,259
2000	619	999	388	2,006
TOTAL	1,577	15,384	5,681	20,636
MEDIA	175	1,709	631	2,580
DESV PAD	189	3,376	455	4,009

TOTAL SERVICES (E)	TOTAL SERVICES (F)	TOTAL (F - D) (G)	GENERAL COMPLAINTS (H)	GENERAL COMPLAINTS (I)
3.319	12.195	11.144	12.825	40.473
3.276	14.834	14.640	11.182	47.850
6.286	17.794	17.078	21.768	55.447
6.883	18.886	18.021	20.924	53.940
12.620	33.513	30.577	30.813	80.564
	32.647	20.388		54.411
	18.739	16.733		53.539
32.384	129.869	111.848	97.512	332.685
6.477	21.645	18.641	19.502	55.448
3.813	9.165	6.642	7.888	13.536

SERVICES (E) e GENERAL COMPLAINTS (H) excludes "sent letters"

SERVIÇOS (F) e RECL GERAL (I) includes "sent letters"

SERVICES (F) AND GENERAL COMPLAINTS (I) in 1995 were obtained through interpolation

The inconsistencies caused by classifying "correspondence issued" either under "queries" or "complaints" also affects the data in this table. Disaggregated data for complaints about services and total complaints excluding "correspondence issued" are available only for 1994 and 1996-1998.⁸⁸ This is why the table has two columns for "services" (columns E and F) and two for "total complaints" (columns H and I), excluding or including "correspondence issued." Moreover, data for 1995 was obtained by interpolation.⁸⁹ Aggregate data for complaints and que-

88. See CADAstro 1994, 1996, 1998, *supra* note 84.

89. See Oliveira, *supra* note 1, at 106.

ries including “correspondence issued” (where available) are given in Appendix A.1.

It can be seen that the total amount of justified complaints against the three sectors analyzed decreased in 1995, but the decrease was accompanied by a proportional fall in the total number of complaints about “services” (column E) and “total complaints” (column H)⁹⁰. In 1999, the total number of justified complaints about telecommunications (telephony) grew very sharply, accounting for 32.4% of all complaints about “services” (column F) and 19.4% of “total complaints” (column I).⁹¹ Can a difference in the evolution of complaints relating to the three sectors analyzed be observed when compared with complaints relating to other services or with the total number of complaints? Figure 5 illustrates this trend.

Figure 6: Procon-SP—Evolution of Justified Complaints Relating to Regulated Sectors Compared with Evolution of Complaints Relating to Other Services & Total Complaints

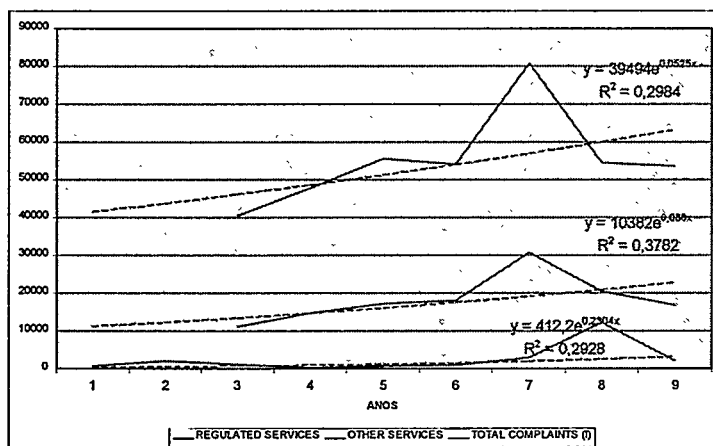


Figure 6 shows the evolution of justified complaints about the regulated sectors analyzed (telephony, electricity and water supply), compared with justified complaints

90. See CADASTRO 1995, *supra* note 84.

91. See CADASTRO 1999, *supra* note 84. In the following year, there were 999 justified complaints to Procon-SP about telecommunications. The decrease can be attributed to the fact that Anatel began operating a federal service to receive complaints from any citizen on this subject. See CADASTRO 2000, *supra* note 81.

about other services and total justified complaints.⁹² In order to answer the question posed earlier, we plotted a regression for justified complaints against years in the three cases based on a semi-logarithmic specification. The results corroborate the hypothesis that the number of complaints about regulated services during the period increased proportionally more than total complaints and complaints about other services. The coefficient for the evolution of complaints about regulated services was 0.2304, whereas the coefficient for other services was 0.088 and the coefficient for total complaints was 0.0525. These values translate into the following rates of increase in complaints relating to the three sectors, other services and total complaints for the period 1992-2000: 23%, 8.8% and 5.25% respectively.⁹³

However, it should be noted that: (i) the t-test for statistical significance does not reject the null-coefficient hypothesis at 90% significance, p-values are 13%, 14% and 20% respectively; (ii) the data available include "correspondence issued" in complaints about other services and total complaints, unlike complaints about the three sectors analyzed, thus overestimating the increase in the occurrence of these variables; and (iii) "total complaints" includes complaints about other regulated services such as banking and healthcare, thus weakening the conclusion about the trends observed in complaints relating specifically to the regulated sectors in question.

The graphs in Figure 7 facilitate a comparison of complaints received about each of the three sectors analyzed in the period 1992-2000.⁹⁴ In percentage terms for the entire period, complaints relating to telecommunications were processed most effectively: 86% were resolved in this case, while the proportion of complaints about electricity and water supply resolved was 38% and 64% respectively. However, the graphs in Figure 7 point to an even more important trend: The relative share of complaints resolved increased in all sectors during the period,

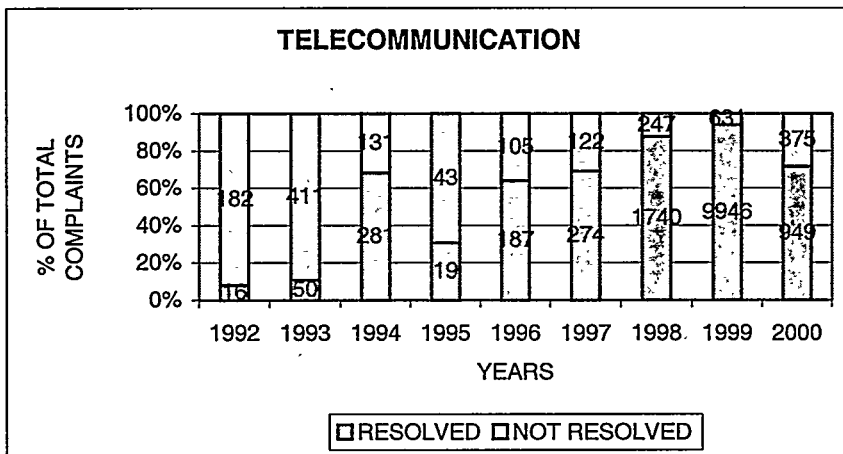
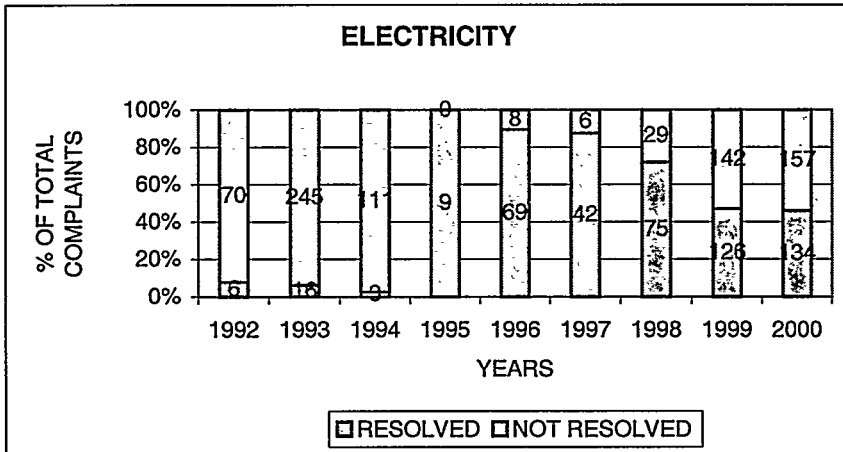
92. See CADASTRO 1992-1993, *supra* note 86; CADASTRO 1994-1999, *supra* note 84; CADASTRO 2000, *supra* note 81.

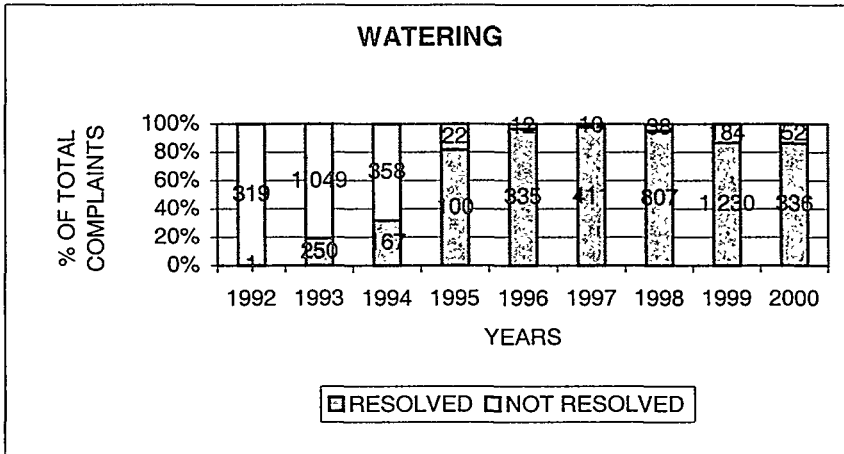
93. See Regression Results in Appendix A.2.

94. See CADASTRO 1992-1993, *supra* note 86; CADASTRO 1994-1999, *supra* note 84; CADASTRO 2000 *supra* note 81.

suggesting that consumer protection has effectively increased in importance and has been more effectively enforced in recent years.

Figure 7: Procon-SP — Resolved Complaints in Telecommunications, Electricity & Water Supply, 1992-2000.





IV. RELATIONS BETWEEN COMPETITION POLICY, REGULATION & CONSUMER PROTECTION

This Section is divided into three parts. The first analyzes the functions of regulation, competition policy and consumer protection from a comparative perspective. The second introduces the concept of consumer sovereignty and proposes a method of measuring it in the case of telecommunications, electricity and water supply. The third and last part suggests institutional configurations of the three functions in accordance with the degree of sovereignty in each of the sectors analyzed.

A. Competition Policy, Regulation & Consumer Protection From A Comparative Perspective

Figure 8 compares the functions of competition policy, regulation and consumer protection. The regulatory function has broader objectives, which involve technical, sanitary, environmental and economic regulation as well as oversight, inspection and preventive action. Its activities include substitution for market mechanisms and it mainly precedes the consummation of market transactions.

The methods used in consumer protection also involve substitution for market mechanisms, but its objec-

tives are more limited and the activities concerned take place mainly after transactions are concluded. The objectives of competition policy are also more limited but the methods used to achieve them prioritize the use of market mechanisms. All three functions are justified from the standpoint of economic theory by the existence of market failures. These failures originate in problems of market power, asymmetric information, and the existence of public goods or externalities. The general objectives of the three functions are convergent (promotion of consumer well being), and each agency specializes in carrying out its specific activities. However, some activities are common to the functions of regulation and competition policy (economic regulation), while others are common to the functions of regulation and consumer protection (oversight and preventive action).

With regard to the relations between competition policy and consumer protection, although their general objectives are convergent and the two functions reinforce each other, they do not share a significant number of routines in performing their specific activities. Thus, there is no justification for suggesting unification of the two, at least not from the standpoint of administrative macro-processes.⁹⁵

95. Similarly, activities designed to promote competition and maintain macroeconomic stability or attract foreign direct investment are mutually stimulating, but this does not mean that mechanisms for coordination of their activities should be created, linking CADE with the Central Bank and the Finance Ministry.

Figure 8: Comparison of the Functions of Competition Policy, Regulation & Consumer Protection

	Antitrust	Regulation	Consumer Protection
Objectives	Narrower: efficiency on allocation	Broader: services popularization, regional integration, environmental	Narrower: consumers' perspective
Method	Emphasizes market mechanisms	Substitution of market mechanisms	Substitution of market mechanisms
Timing and frequency of intervention	"ex-post" (conduct) and "ex-ante" (estructure)	Mainly "ex ante"	Mainly "ex post"
Kind of intervention	Behavioral and structural measures	Structural measures	Behavioral measures

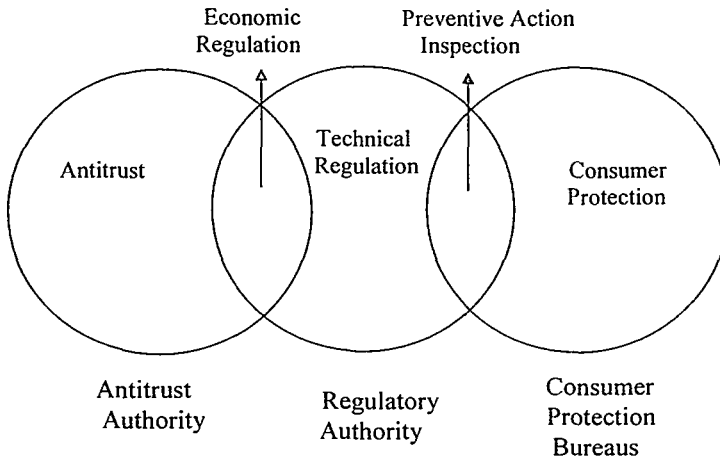


Figure 9: Relations Between Competition Policy & Consumer Protection—Optimal Configuration

Transaction Costs Economy of Scope	High	Low
High	Single Agency	
Low		Separate Agencies (Antitrust and Consumer Protection)

If there are significant economies of scope in the performance of common activities and if the transaction costs are high, there will be incentives for the agencies to share activities. On the other hand, if the transaction costs are high but there are no economies of scope, agencies will tend to perform their activities separately. Figure 9 illustrates this argument. The relationship between regulation and consumer protection combine low economies of scope with low economies of transaction costs. In this case, separation of their activities appears to be more efficient. On the other hand, both the relationship between regulation and competition policy and the relationship between regulation and consumer protection combine low economies of scope with high transaction costs. In both cases, the most efficient institutional configuration is indefinite.

The possible institutional configurations of the relationship between regulation and competition policy are analyzed in a previous study.⁹⁶ This Article emphasizes the relationship between regulation and consumer protection. As already mentioned, specific activities can be observed both for the regulatory function (cancellation of utility license contracts, for example) and for the consumer protection function (protection of vulnerable consumers, for example). However, there are also activities that are common to both functions, especially oversight, inspection and protection, all of which can be shared.

96. See Gesner de Oliveira & Caio Mário da Silva Pereira Neto, *Regulation and Competition Policy: Toward an Optimal Institutional Configuration in the Brazilian Telecommunications Industry*, 25 *BROOK. J. INT'L L.* 311 (1999).

B. Degrees of Consumer Sovereignty

There are several factors that may affect the degree of consumer sovereignty. This concept can be defined as the extent to which market failures can be deemed to exist so that consumers require more or less systematic protection from the state. There are three basic reasons for which consumer protection is justified from the economic standpoint: (i) information asymmetry; (ii) the organizational cost of protecting diffuse interests; and (iii) monopoly market power.⁹⁷ The hypothesis advanced here is that in modern economies, these factors tend to acquire greater importance and consumers therefore require state protection. Thus, the degree of consumer sovereignty should vary from one sector to another in accordance with the criteria mentioned. The following four subsections discuss consumer sovereignty in telecommunications, electricity and water supply on the basis of each criterion.

1. Asymmetry of Information: the Difficulty of Evaluating Goods and Services

Yves Evrard & Alziro Rodrigues classify services according to the degree of consumer access to information.⁹⁸ Based on this classification, services are characterized by three types of attributes: (i) search attributes - services whose attributes can be readily assessed by consumers via price and/or quality before purchase; (ii) experience attributes - services the consumer acquires knowledge about and evaluates through experience after they have been performed; and (iii) credibility attributes - services whose complexity is so great that it is difficult to evaluate their quality even after they have been rendered.⁹⁹

97. See Oliveira, *supra* note 1, at 117.

98. Yves Evrard & Alziro Rodrigues, *Uma Classificação de Serviços Baseada na Teoria Microeconômica da Informação*, 1 BUS. & ADMIN. ELEC. J. 1, at <http://read.adm.ufrgs.br/read01/artigo/evrard.htm#evrard> (last visited Oct. 23, 2001).

99. *Id.* at 4.

Figure 10: Types of Service Attributes

Search Attributes	Experience Attributes	Credibility Attributes
Attributes are identifiable before services are provided Example: visual appearance of service's place, personal presentation of employees.	Attributes are identifiable after or at the same time services are provided Examples: employees' courtesy and kindness; promptness in providing the service.	Attributes are hardly identifiable even after services are provided Examples: surgical work precision, use of original auto parts in replacement service.

This classification scheme is summarized in Figure 10, while Figure 11 shows the results of our survey on the perception of service attributes in telephony, electricity and water supply. The latter is used as a proxy to compensate for lack of information on basic sanitation services.

Figure 11: Results of Survey on Perception of Service Attributes

Service	Attribute		
	Search	Experience	Credibility
Watering repair	4 (4.4%)	67 (72.8%)	21 (22.8%)
Gas and electricity provision	33 (35.9%)	43 (46.7%)	16 (17.4%)
Telecommunication	18 (19.6%)	60 (65.2%)	14 (15.2%)

Figure 11 shows that although consumers predominantly perceive experience attributes in all three services, there are gradations in this classification. In water supply,¹⁰⁰ the perception of credibility attributes is also significant (22.8%). This service is indeed more difficult to evaluate than the others. As for gas and electricity supply, search and experience attributes are of roughly equal importance. Evaluation of electricity is more immediate than for other services. Lastly, telecommunications represents an intermediate case in which experience attributes clearly predominate and the other two attributes are of approximately equivalent importance.

100. Water supply is taken to represent sanitation, given the similarity between these two services.

2. Consumer Organization Cost

The relations between consumers and services in telecommunications, electricity and water supply can also be classified in accordance with consumer organization cost. The relevant criteria for consumer organization cost are associated with the cost of mobilizing diffuse interests and the judicial costs potentially deriving from collective action.¹⁰¹ The more the interests involved are geographically dispersed, the less sovereignty there will be for individual consumers in exercising protection rights.¹⁰² The theoretical problem arising from the question of diffuse interests is that of "free riders," when organization cost is higher than the *individual* benefits deriving from litigation, individuals under-invest in this type of action. Individual actors prefer to wait for other individuals to take legal action so that they can opportunistically enjoy a "free ride" by taking advantage of other people's initiatives.

A possible proxy for organization cost is the geographic dispersal of the consumers involved. For example, consider the case of water and electricity consumers who face a problem with quality of service: in general, these consumers will tend to be geographically concentrated, unlike consumers of telecommunications, especially in the case of wireless telephony. On the other hand, the possibility of collective action by public and private consumer protection agencies reduces organization cost and mitigates the "free rider" problem in dealing with issues of consumer protection.

3. Market Power in Relevant Markets

The last criterion for classifying services from the standpoint of consumer sovereignty is associated with the amount of competition in the markets involved. As discussed in Section I, the consumer protection and competition policy functions act as mutual stimulants: more competitive economies enable more effective consumer protec-

101. Oliveira, *supra* note 1, at 119.

102. *Id.* at 120.

tion inasmuch as they offer consumers more choice and standards for comparison.¹⁰³

Thus, the greater the competition and the bargaining power of consumers in a particular relevant market, the greater the consumer's sovereignty will be. In the case of water supply, consumers of the service in São Paulo are still subjected to a monopoly, "Sabesp." Consumers of telecommunications, on the other hand, already enjoy the benefits of gradually increasing competition, both in wireless and in fixed-line telephony. In the case of electricity, the key factor is the difference between free consumers, who now enjoy the benefits of a certain amount of competition, and captive consumers, who do not yet have a choice.

4. Classifying Sectors in Terms of Consumer Sovereignty

Figure 12 shows a possible classification of the three sectors analyzing the above criteria. The more points an activity has, the lower the degree of sovereignty enjoyed by local consumers in exercising their rights and the greater the need for regulation centralized in the federal sphere. Some explanation is necessary as an aid in understanding Figure 12. The criterion "evaluation difficulty" is scored using the method propounded by Evrard & Rodrigues.¹⁰⁴ Geographic dispersal is used as a proxy for consumer organization cost in each service. Thus, organization cost is higher in telecommunications since consumers of this service are usually more geographically dispersed, making coordination more costly for consumer protection agencies. Market power can be measured indirectly by an indicator of market concentration, such as the Simple Concentration Index (e.g., CR4) or the Herfindahl-Hirschmann Index.¹⁰⁵ The greater the market power, the more points are attributed to the service.

103. *Id.*

104. *See* Evrard & Rodrigues, *supra* note 98, at 4-5.

105. *Id.*

Figure 12: Need for Centralized Regulation in Telecommunications, Electricity & Water Supply

	Evaluation Difficulty	Cost of Organization	(Lack of) Consumers Bargaining Power	Total
Watering	+++	+	+++	8
Telecom	++	+++	++	10
Electricity (captive)	+	+	+++	6

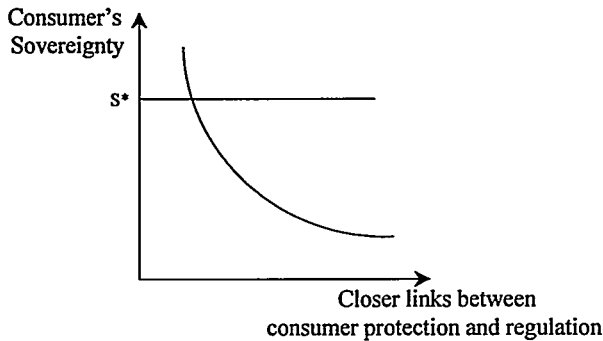
Considering the influence of the three criteria, the higher the total score of a given service, the less autonomy consumers of the service will enjoy in exercising their right to protection. Figure 11 shows that consumers of telecommunications have the least autonomy while those of electricity have the most.¹⁰⁶ What is the most efficient way to set up the relationship between consumer protection and regulation in each case? Subsection C presents a "menu" of possible institutional configurations involving the relations between regulation and consumer protection.

C. Relations Between Regulation & Consumer Protection

The purpose of this section is to put forward alternative models for the institutional configuration of the relationship between regulation and consumer protection. One hypothesis underlying the construction of these models is that the lower the degree of consumer sovereignty, the closer the links between consumer protection and regulation will tend to be. This hypothesis is represented in Figure 13.

106. For the sake of comparison, we have not considered free consumers of electricity. Their organization cost, bargaining power and ability to evaluate the service make them far more autonomous in exercising protection rights than captive consumers of electricity. The data on complaints processed in the Appendix would appear to refute this conclusion, since, in percentage terms, more complaints about telecommunications than electricity were handled.

Figure 13: Consumer Sovereignty vs. Relations Between Consumer Protection Agencies & Regulators



In Figure 13, “S*” represents the maximum degree of sovereignty consumers can obtain in exercising protection rights. When consumer sovereignty is limited, a minimum of regulation will always be necessary, whether it takes the form of public health inspection (performed by the Agriculture Ministry’s Federal Inspection Service (“SFI”), for example) or safety and technical standards (performed, for example, by the National Institute of Metrology, Standardization & Industrial Quality (“Inmetro”), an agency of the Development & Industry & Trade Ministry).

As discussed in Section IV.A., there is an area of intersection in the scope of the activities performed by the agencies in charge of regulation and consumer protection. While the same activities performed by regulators and consumer protection agencies are specific to these functions, other activities may be shared. For example, inspection and prevention fall within the scope of both functions. Considering that these common activities could be concentrated in one or another agency, it is possible to conceive of a continuum of institutional configurations between regulation and consumer protection, as shown in Figure 14.

Figure 14: Continuum of Institutional Configurations for Relations Between Regulation & Consumer Protection

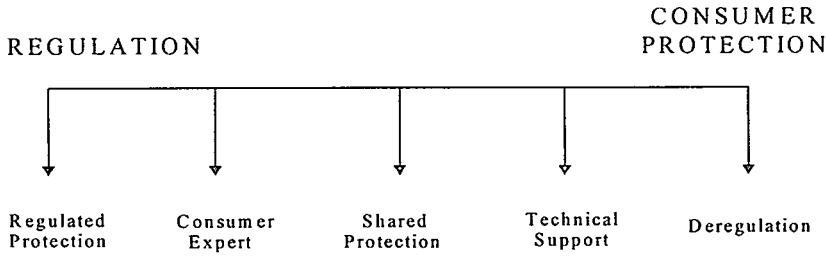


Figure 14 defines five ideal models for the relationship between regulation and consumer protection: (i) Regulated Protection; (ii) Consumer Expert; (iii) Shared Protection; (iv) Technical Support; and (v) Deregulation. Each of these models is characterized by an alternative division of the performance of specific and shared functions. Services in which consumers enjoy less autonomy in protecting their rights tend to adopt models more to the left, and vice-versa. The five models are schematically shown in Figure 15. In the Regulated Protection model, all common functions are performed by the regulatory authority. In some cases, even the specific Consumer Protection function can be shared with the regulator.

Figure 15: Models for Configuring Relations Between Regulation & Consumer Protection

A) Regulated Protection

	Regulation	Prevention Activities	Inspection	Consumer Protection
Regulation Authority	X	X	X	(X)
Consumer Protection Bureaus				X

B) Consumer Expert

	Regulation	Prevention Activities	Inspection	Consumer Protection
Regulation Authority	X	X	X	(X)
Consumer Protection Bureaus			X	X

C) Shared Protection

	Regulation	Prevention Activities	Inspection	Consumer Protection
Regulation Authority	X	X	X	(X)
Consumer Protection Bureaus		X	X	X

D) Technical Support

	Regulation	Prevention Activities	Inspection	Consumer Protection
Regulation Authority	X	X		
Consumer Protection Bureaus		X	X	X

E) Deregulation

	Regulation	Prevention Activities	Inspection	Consumer Protection
Regulation Authority	-			
Consumer Protection Bureaus		X	X	X

In the "Consumer Expert" model, most activities are performed by the regulator. The exception is inspection, which is shared with consumer protection agencies. This model is appropriate for situations where consumers enjoy very little autonomy and complex technical knowledge is required. In this case, consumer protection agencies invest in the figure of the expert who will assist them with oversight and inspection. Here the consumer protection activities involved can also be shared with the regulator. This model is appropriate for consumer protection in telecommunications, for example, where consumers enjoy little autonomy and complex technical knowledge is required.

The third model is "Shared Protection," where inspection and prevention activities are shared, often through contractual arrangements involving regulatory authorities subordinated to state governments. This model is appropriate for consumer protection in water supply. Although the water companies are generally controlled by municipal governments, regulation depends on state and regional coordination mechanisms involving asymmetry of information between the regulatory authorities and the regulated company.

The fourth model is "Technical Support," where most activities are performed at the local and state levels.

The exception is prevention, which is shared with the regulator. The fairly high level of technical knowledge required and the need for coordination among segments calls for participation by a central regulatory agency, but because consumers can easily evaluate the service, and consumer organization cost is low (low geographic dispersal), consumer protection can be relatively decentralized.

The last model is "Deregulation," in which there are no regulatory activities and all activities are conducted by the local and/or regional consumer protection agencies. Given that there will always be some level of regulation, this model is a theoretical possibility only.

In light of the proposed inverse relation between consumer sovereignty and centralization of protection, and considering the degree of consumer sovereignty in telecommunications, electricity and water supply, as shown in Figure 11, the relations between regulation and consumer protection in telecommunications are associated with a more centralized institutional set-up such as "regulated protection" or "consumer expert." Indeed, consumer protection in this sector seems to be increasingly concentrated within the jurisdiction of Anatel, the federal telecommunications regulator. In water supply and electricity, the appropriate models would seem to be "shared protection" and "technical support" respectively, given the local nature of service provision on one hand, and on the other hand, the relative difficulty of evaluating water supply services.

V. CONCLUSION

The principal conclusions drawn in this Article are as follows: (i) consumer complaints have increased significantly in recent years; (ii) the volume of complaints has increased most in regulated sectors; (iii) the need for consumer protection depends on the degree of consumer sovereignty, which in turn depends on the difficulty of evaluation, market power and organization cost; (iv) the smaller the degree of consumer sovereignty, the greater the need for centralized protection and hence the more regulators that will tend to get involved in consumer protection; (v) the actual configurations of the relationship

between consumer protection and regulatory agencies in the three selected infrastructure sectors (telecommunications, electricity and water supply) match the hypothesis developed in this study; (vi) there are no clearly defined configurations for the relations between regulatory and competition agencies; and (vii) the combination of small scope economies and low bureaucratic transaction costs suggests that consumer protection and competition policy would best be kept separate in terms of their operations.

APPENDIX

A.1.: Procon-SP: Total Complaints and Queries

1994				
AREAS	QUERIES	SL	COMPLAINTS	TOTAL
FOOD	2,221	36	392	2,649
HEALTH	15,094	2,959	4,035	22,088
HOUSING	110,633	4,124	831	115,588
PRODUCTS	23,650	7,988	2,868	34,506
SERVICES	34,748	8,876	3,319	46,943
FINANCIAL AFFAIRS	18,241	3,665	1,059	22,965
INSPECTION	0	0	321	321
EXTRA-PROCON	24,396	0	0	24,396
CAD-PESQ	0	0	0	0
TOTAL	228,983	27,648	12,825	269,456

1995				
AREAS	QUERIES		COMPLAINTS	TOTAL
FOOD	1,523		670	2,193
HEALTH	10,462		1,205	11,667
HOUSING	112,788		1,749	114,537
PRODUCTS	41,571		3,189	44,760
SERVICES	55,365		3,276	58,641
FINANCIAL AFFAIRS	23,064		772	23,836
INSPECTION	0		321	321
EXTRA-PROCON	34,646		0	34,646
CAD-PESQ	0		0	0
TOTAL	279,419		11,182	290,601

1996				
AREAS	QUERIES	SL	COMPLAINTS	TOTAL
FOOD	1,056	20	298	1,374
HEALTH	15,480	3,813	4,081	23,374
HOUSING	49,268	3,172	1,575	54,015
PRODUCTS	29,745	11,022	7,086	47,853
SERVICES	48,365	11,508	6,286	66,159
FINANCIAL AFFAIRS	19,047	4,144	2,099	25,290
INSPECTION	0	0	343	343
EXTRA-PROCON	32,451	0	0	32,451
CAD-PESQ	51,969	0	0	51,969
TOTAL	247,381	33,679	21,768	290,601

1997				
AREAS	QUERIES	SL	COMPLAINTS	TOTAL
FOOD	948	78	327	1,353
HEALTH	9,674	2,607	3,120	15,401
HOUSING	21,825	2,085	1,180	25,090
PRODUCTS	25,414	11,383	6,875	43,672
SERVICES	39,254	12,003	6,883	58,140
FINANCIAL AFFAIRS	17,682	4,860	2,311	24,853
INSPECTION	0	0	228	228
EXTRA-PROCON	33,726	0	0	33,726
CAD-PESQ	35,861	0	0	35,861
TOTAL	184,384	33,016	20,924	238,324

1998				
AREAS	QUERIES	SL	COMPLAINTS	TOTAL
FOOD	1,480	106	316	1,902
HEALTH	12,750	3,265	2,361	18,376
HOUSING	19,385	2,460	1,491	23,336
PRODUCTS	38,533	11,775	7,555	57,863
SERVICES	80,153	20,893	12,620	113,666
FINANCIAL AFFAIRS	45,183	11,252	6,141	62,576
INSPECTION	0	0	329	329
EXTRA-PROCON	56,835	0	0	56,835
CAD-PESQ	33,551	0	0	33,551
TOTAL	287,870	49,751	30,813	368,434

1999			
AREAS	QUERIES	COMPLAINTS	TOTAL
FOOD			692
HEALTH			16,244
HOUSING			13,344
PRODUCTS			34,864
SERVICES			115,299
FINANCIAL AFFAIRS			49,951
INSPECTION			0
EXTRA-PROCON			67,641
CAD-PESQ			0
			298,035

2000			
AREAS	QUERIES	COMPLAINTS	TOTAL
FOOD			
HEALTH			
HOUSING			
PRODUCTS			
SERVICES			
FINANCIAL AFFAIRS			
INSPECTION			
EXTRA-PROCON			
CAD-PESQ			
TOTAL			285,227

A.2.: Regressions Results

It is assumed a log-linear function, as in: $y = Ae^{\beta x}$ where y is the number of complaints and x are years. The table shows results:

	Regulated Services	Other Services	Total Complaints
a	6,02	9,25	10,58
s. d.	0,76	0,32	0,23
Beta	0,23	0,09	0,05
s. d.	0,14	0,05	0,04
F	2,9	3,04	2,13
R2	0,29	0,38	0,3
Observations	9	7	7