Some New Ideas on the Role of Legal Analysis applied to the Regulation of Telecommunications Services in Brazil*  
Algumas novas ideias sobre o papel da análise jurídica aplicada à regulação de serviços de telecomunicações no Brasil

Abstract

Purpose – The paper aims to present new ideas and analytical approaches developed in recent years by Brazilian legal scholars regarding regulation and economic development. Regulatory law of telecommunications services is taken as an example of application of such new ideas and analytical approaches.

Methodology/approach/design – Two main approaches to the relationship between law and economic issues are described: the New Law and Development (NLD) approach and the Legal Analysis of Economic Policy (LAEP) perspective. The paper highlights prominent ideas of each perspective.

Findings – The paper shows that there are structured ideas available in recent Brazilian legal literature which have a non-negligible potential of being explored in legal discussions and analyses of economic policy and regulatory issues of many sectors of emerging economies, including the telecommunications industry.

Originality/value – The paper offers valuable contributions that may help in efforts to enhance and innovate the role of legal expertise in the regulatory process of several economic sectors, including the telecommunications sector.

Keywords: Internet regulation, legal analysis, economic development, effectiveness of fundamental and human rights.

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1. INTRODUCTION

In April 2014, the Brazilian government approved legislation establishing several guidelines for internet service provision and use. The new law, dubbed Brazil’s “Internet Constitution”, was hailed locally and internationally as a remarkable innovation in the area of internet regulation, since it introduced clear rules regarding the protection of freedom of expression and access to information while also imposing limits on the gathering and use of metadata of internet users in Brazil.\(^1\)

Brazil’s new legislation on internet regulation drew international attention partly because it incorporated several demands from internet users in Brazil and elsewhere, but also because it came in the wake of revelations of extensive internet spying by states. Moreover, since it was formally approved during the opening session of the Net Mundial world summit, the new Brazilian law was inevitably perceived as a legal framework that could potentially set influential examples to be followed in future negotiations in the area of global internet governance.\(^2\)

The adoption of Brazil’s “Internet Constitution” and the debates fostered by the NetMundial summit in 2014 were politically charged and involved a number of controversial aspects of internet regulation.\(^3\) Far less controversial has been the perception that widespread access to technologically advanced information and communications technology has become increasingly relevant to economic development. The availability of technologically up-to-date broadband services has thus been considered a crucial condition for social and economic development of nations around the world.

Indeed, in the last few years, digital development in general and the universalization of internet broadband services have been recognized as key policies for social and economic development. The International Telecommunications Union (ITU) has recently estimated an expansion of fixed-broadband to more than 688 million and of mobile-broadband subscriptions to 2.1 billion.\(^4\) Many governments have elaborated national plans for the

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\(^1\)See Reuters (2014).
\(^3\)The possibility that United Nations take up control of internet governance and the fact that internet “giants” such as Google and Facebook (whose business model relies on citizens’ data) would benefit from ideas discussed in the NetMundial Meeting were some of the controversial aspects of the debates. See BBC News (2014) and Monitor Global Outlook (2014).
\(^4\)International Telecommunication Union (2013, p. 2).
development of broadband services, including Brazil, which unveiled its own plan in 2010.

As internet service markets have grown, relevant regulatory issues have tended to become more complex, encompassing challenges such as the search for new spectrum as a consequence of the growth of the mobile sector, the elaboration of transnational and regional plans of spectrum use, cross-border privacy and data protection, the provision of incentives to investment in expansion and private sector innovation and the maintenance of economic affordability. The capacity of the state to respond to regulatory challenges, however, is in great measure influenced by legal doctrines. Such doctrines offer the language by which many authorities (including judicial courts, administrative agencies, public prosecutors and accounts tribunals) frame issues and elaborate decisions affecting policy-making and implementation.

The present paper describes how recent legal discourse has been used to frame issues and responses to regulatory challenges in the telecommunications sector in Brazil. The main goal of the paper is therefore to offer an account of Brazilian legal discourse on regulation as applied to telecommunications regulation in Brazil, with a special focus on new ideas by which legal scholars have strived to connect regulation and economic development. In elaborating such new ideas – belonging to the so-called “New Law and Development” (NLD) and the “Legal Analysis of Economic Policy” (LAEP) perspectives, respectively – scholars have engaged in efforts to overcome both the genre of legal analysis that subordinates legal issues to conceptions derived from neoclassical economics and the style of formalistic, black-letter law analysis, which still remains an important legacy of Brazilian professional legal culture.

Whereas for several decades developmentalist policies were adopted to expand services in the telecommunications sector in Brazil, several administrative practices hampered the attainment of desirable goals, prompting the introduction of pro-market reforms. Section 2 describes these policy legacies from which more recent regulatory challenges emerged in the telecommunications sector in Brazil. Sections 3 and 4 offer an account of how new ideas emerged in the form of (i) development-oriented legal arguments and (ii) arguments articulated under the NLD approach. In both cases, the new ideas strived to offer responses to perceived inefficiencies of service and lack of social content of sectoral policies. Section 5 describes the LAEP approach to legal analysis. Section 6 applies some reconstructed legal categories and analytical frameworks of the LAEP approach to provide new insights and normative

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5As stated in a 2011 ITU report, “at least 84 percent of all economies have a national e-strategy in place, and at least 14 economies are in the process of developing such a strategy”. International Telecommunication Union (2011, p. 4).

6Brazil’s National Broadband Plan was introduced by Decree no. 7,175 of May 12, 2010.
arguments about relevant aspects of telecommunications services regulation and reform in Brazil, with an empirical focus on broadband regulation. The overall arguments of the paper are summarized in Section 7.

2. THE POLICY BACKGROUND

In Brazil concerns with the relationship between law and economic development have emerged in an institutional context that had grown out of transitions from “old developmentalist law” lasting from the 1930s until the mid-1990s. This was a period in which substantial investment was made in the creation and expansion of telecommunications services. Yet, many administrative practices came to be adopted which produced severe inefficiencies and limited the social reach of services.

For many decades, the only significant piece of legislation on telecommunications in Brazil remained the Decree-Law no. 21,111, which had been adopted in 1932 to regulate radio communication services. Under that law, a decentralized system of regulation was developed in which administrative powers were distributed to states and municipalities, hindering policy coordination. Such regulatory practice, which was prevalent throughout the 1940s and 1950s, could hardly be reconciled with the efficient allocation of resources and with coherent standards of technological development and managerial organization.

This meant that for many years Brazil had adopted a model of fragmented regulation, under which the power to regulate local communication services was delegated to states and municipalities, which often used regulation to serve clientelistic ends, while the power to handle tariff-setting was attributed to the three levels of the federation (the central government, state governments and municipalities). All this limited the ability of the telecommunications industry (including public and private investments in infrastructure for telephony services, telex, telegraph, international communications and radio) to become efficiently organized. The fragmented mode of regulation proved unable to interconnect many local networks and integrate communication services nationwide.

The creation of a nationally integrated system of telecommunications was made possible in Brazil only after the introduction of the so-called Telecommunications Code of 1962, which established the National

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7Castro (2013).
9See Rhodes (2006).
10This Code was adopted by a federal statute: the Law no. 4,117 of August 27, 1962.
Telecommunications System and created a centralizing policy-making body, the National Telecommunications Council. The 1962 Code also set the legal grounds for the creation, in 1965, of a state-owned company – called Embratel – that would handle all long-distance connections between major Brazilian cities. Furthermore, since 1972, other services in the telecommunications sector were centralized under a conglomerate controlled by Telebras, a holding company owned by the central government.\(^{11}\)

In the first decade of operation of the so-called Telebras System, comprised of the holding company and more than 20 subsidiaries, the growth of services was significant: The 1.4 million phones in 2,200 locations existing in the early 1970s expanded to 5.8 million phones in 6,100 locations by the early 1980s. In twenty years, the growth of installed telephone terminals of Telebras exceeded 500%.\(^{12}\)

However, demand was growing much faster than supply. For the Telebras System to continue to expand and improve the quality of service, huge investments were needed. Yet in the 1980s, the eruption of the “debt crisis” in Latin America and the growth of “political abuses” in management procedures – including the distribution of company jobs under patronage schemes, tariff manipulation through cross subsidies and the use of state-led investments as macroeconomic policy instruments – increasingly limited the availability of funds that governments were able to channel to new investment in the telecommunications sector.\(^{13}\) By 1991 not only investments stagnated, but Telebras experienced losses and a negative internal rate of return.

Such economic difficulties, coupled with international influences and local political changes, led to a radical transition in the relationship between the state and the economy in Brazil. Sweeping pro-market reforms (including privatization of state-led investments in many sectors and the creation of independent regulatory agencies) were adopted since the mid-1990s.\(^{14}\) In the legal field, new ideas were produced by lawyers to implement such pro-market reforms.\(^{15}\)

Given the presence of rent-seeking groups that benefitted from the general characteristics of the Telebras System, pro-market reforms of the telecommunications sector in Brazil marked a significant breakthrough led by political forces attuned with policy reform agendas that were being propagated

\(^{11}\)The creation of Telebras, a state-owned holding company, was authorized by Law no. 5,792, of July 11, 1972. Later, Decree no. 74,379 of August 8, 1974, defined Telebras as "the general utility for the operation of public telecommunications services throughout the national territory".


\(^{13}\)Cf. Rhodes (2006).

\(^{14}\)Similar transitions occurred in other Latin American countries. See Rhodes (2006).

\(^{15}\)See Castro (2013).
by international financial institutions such as the International Monetary Fund (IMF) and the World Bank (WB) since the late 1980s. As part of the general orientation in favor or pro-market reforms, the privatization of the Telebras System was a politically prominent achievement.

Although the Telebras conglomerate was largely privatized under the General Law of Telecommunications (GLT) adopted in 1997, politicians concerned about social welfare and local economic development sought to embed broad policy goals in the approved legislation. These goals were soon considered general legal principles that required telecommunications companies to pursue network expansion (called universalization of services) and the creation of a competitive environment that could benefit consumers’ right to choose a service provider.

3. THE RESUMPTION OF DEVELOPMENT-ORIENTED LEGAL ARGUMENTS

It was against this background of policy legacies that, since the mid-2000s, legal scholars began to develop new perspectives on regulation which by and large broke off from the conceptual frameworks used to sustain pro-market reforms. Development-oriented legal scholars were concerned about what they perceived as a biased legal environment put in place mainly by the GLT, which secured unfair economic advantages to investors while offering limited benefits to consumers.

Several alternative ideas and arguments about the relationship between the law and economic processes began to emerge, often drawing on many different authors, among which were economists, lawyers and social scientists. One argument that began to be explored was that there is no such thing as a “general theory” or a “pure theory” of regulation. Development-oriented lawyers, it was argued, should therefore reject claims that there is an objective and settled concept of regulation that must be taken for granted by regulators. Rather, it was argued, regulators should be aware of the fact that ideas about regulation are open-ended and always context-specific.17

A second notion that drew the attention of jurists was that, given its relation to context, regulation cannot be considered as a process that shapes, but must instead be viewed as shaped by, several elements, including specific

16The privatization of the Telebras System occurred in 1988, when assets of the holding company were auctioned off to private investors. The holding company, Telecomunicações Brasileiras S.A., however, would be “revived” under Decree no. 7,175 of 2010, that instituted Brazil’s NBP.
characteristics of a regulated sector, institutional elements present in society, the stage of social and economic development, and the local legal system.

Third, development-oriented legal scholars stressed that regulation must take into account conditions that characterize underdevelopment. Such conditions must be seen as resulting from an unequal process of diffusion of technological innovations produced by industrial capitalism.

Moreover, development-oriented legal scholars also argued that there are both economic and non-economic aspects of regulation relevant to policy-making applied to the telecommunications sector in Brazil. According to this view, regulation of the telecommunications sector in less developed countries needs to incorporate concerns that “transcend aspects of pure efficiency”. The argument is that economic aspects of regulation are usually tied to concepts such as “Pareto optimality” or “Kaldor-Hicks efficiency”, which very often reflect reductionist cost-benefit analyses or simplified calculations. Non-economic aspects of regulation, on the other hand, have to do with the realization of ideals of justice or fairness. The upshot is that a fair allocation of resources does not necessarily have to be based on efficiency-related regulatory criteria. Thus redistributive concerns – for example, the requirement of universalization in the form of mandatory new investment – must not be excluded from regulation of the telecommunications sector.

Another argument advanced by development-oriented legal scholars was that there is no inevitable trade-off between equity and efficiency that necessarily needs to be considered by regulators. Rather, it is argued, a review of relevant literature indicates that a positive correlation (instead of a negative one) exists in many instances between equity and efficiency. In the telecommunications sector, positive correlations between equity and efficiency tend to result from positive externalities, which experts call the “network effect”. Such effect has to do with the fact that the economic value of a communications network increases with the growth in the number of subscriptions. The greater the number of participants in the network, the higher is the potential economic value of each subscription (which, incidentally, is not proportionately reflected in the price of a subscription). A market of telecommunication services driven only by competition, as envisaged by market-oriented regulators influenced by neoclassical economic concepts, may thus come to aggregate only a suboptimal

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18 See Coutinho (2005, p. 140). The conceptual distinction between economic and non-economic aspects of regulation and other related notions are drawn by Coutinho from authors such as Ogus (1994) and Prosser (1997).
pool of users from the standpoint of the potential expansion of positive externalities.\textsuperscript{21}

In short, from the late 1990s to the early 2000s, development-oriented legal scholars in Brazil became increasingly aware of the distinctiveness of pro-market policies and institutional arrangements, which were often connected to the core notion that regulation must be reduced to the implementation of competition policy in the context of a “free market”. They also became aware of the potentially beneficial use of pro-market policies in efforts to overcome troubling policy legacies received from the past. At the same time, however, such scholars became acutely concerned with the downside of reductionist, market-based regulation.

Yet the works of development-oriented legal scholars in Brazil for some time lacked a clear articulation with traditions of legal thought capable of equipping lawyers to analyze public policies.\textsuperscript{22} They still lacked conceptual cohesiveness with arguments that were subsequently derived from American legal realism and critical legal literature. It was only with the publication in 2006 of a volume edited by Trubek and Santos, named \textit{The New Law and Economic Development: A Critical Appraisal},\textsuperscript{23} that more significant connections began to emerge between the analytical work of legal scholars in Brazil and broader implications of legal analysis for policy reform and for the establishment of trends in international development cooperation.

\textbf{4. THE NEW LAW AND DEVELOPMENT (NLD) PERSPECTIVE}

Indeed, the book edited by Trubek and Santos, published in 2006, was launched in São Paulo in 2007 and brought several important elaborations that called the attention of development-oriented legal scholars. The articles in the book established a clear connection of legal argument with practices and goals of international development cooperation and its evolution since the second postwar period.\textsuperscript{24} Moreover, they offered valuable critical interpretations of what the law is and of its relationship with policy-making, policy analysis and economic processes and ideas.\textsuperscript{25} Connections between different phases of international development cooperation and legal ideas and claims, including those advanced by Law and Economics\textsuperscript{26} and Law and Finance\textsuperscript{27} on the one

\textsuperscript{22}Cf. Coutinho (2013).
\textsuperscript{23}See Trubek & Santos (eds, 2006).
\textsuperscript{26}See Mercuro & Medema (2006, chap. 2).
hand and, on the other, socio-legal studies, are prominent in the book and are viewed in critical perspective.

From this enlarged and partly modified intellectual context of ideas brought by the writings highlighted above, legal scholars were able to build an explicit connection between arguments related to policy challenges present in different emerging-market countries, such as those forming the Brazil, Russia, India, China and South Africa (BRICS) coalition. This move certainly advances in the direction of preparing the ground for the articulation of a legal language appropriate to inform practices of South-South cooperation.

The elaboration of legal ideas that have contributed to the formation of the NLD perspective received significant inputs also from the book Law and the New Developmental State: The Brazilian Experience in Latin American Context, published in 2013. This volume builds on the general critical perspective established since 2006. Considering the articles present in Law and the New Developmental State, it is clear that the NLD perspective proceeds by blending economic and legal concepts in distinct ways.

On the economic side, the new ideas do not form a solidified or complete “theory”, but do offer a coherent articulation of conceptions about policy reform and represent a clear break with views prevalent in the years of pro-market reforms. The new economic ideas are those put forward by a plurality of authors, among which are Joseph Stiglitz, Dani Rodrik, Luiz Carlos Bresser-Pereira, Ha-Joon Chang, Alice Amsden, Fernando Leiva, and ECLAC economists such as Ricardo Bielschowsky. The pedigree of such ideas certainly connects them with past “heterodox” authors such as Joseph Schumpeter, Alexander Gerschenkron, Alexander Hamilton and others.

One label that appears in the 2013 book and which attempts to capture some of the ideas of some of these authors comes under the name of “Neostructuralism”. This label carries, of course, an indirect reference to the older Latin-American “structuralist” economic thought. Also, prominent among economic ideas useful to characterize the general orientation of the NLD perspective – and here contributions of Alice Amsden about development in South Korea and Taiwan seem crucial – is the notion that economic development is only achieved if (i) the state becomes an active promoter of innovation produced by the private sector, and if (ii) “learning” activities

27 Also known as the “Theory of Origins”. For a discussion, see Garoupa & Pargendler (2014).
28 See, Schapiro and Trubek (eds., 2012).
29 See Trubek et al. (eds., 2013).
30 The term “neostructuralism”, used in Trubek et. al. (eds., 2013, pp. 73, 75) is drawn from Leiva (2008).
31 See Filippo (2009).
become part of the development process. Of course, this vision of the development process assumes that development itself is linked to a context of a “knowledge economy” (as contrasted to economies based on the production of raw materials).

On the legal side, more or less new ideas draw directly or indirectly on a number of socio-legal and critical legal scholars, prominent among which are Duncan Kennedy, Roberto Unger, David Kennedy, David Trubek and Marc Galanter. However, there are also some notions that are presented as effectively novel legal conceptions. The “novel” legal notions are what Trubek, Coutinho and Schapiro\(^ {33} \) call “functionalities” of the law and are close to what Milhaupt and Pistor\(^ {34} \) called “the multiple functions of the law”. These “functionalities”, as Trubek, Coutinho and Schapiro describe them, are the following:

- (i) Safeguarding flexibility (revisability) of policy frameworks.
- (ii) Stimulating orchestration: this translates into promoting horizontal (same-level) and vertical (intergovernmental) institutional cooperation.
- (iii) Framing synergy between public and private actors (which is a general reference to “public-private partnerships”).
- (iv) Ensuring legitimacy, which means: promoting both transparency and social participation in policy-making.

These “functionalities” of the law are said to be typical of law-in-action linked to policy-making in the period following the relative loss of credibility of ideas relied upon to design and implement pro-market reforms. The empirical chapters of *Law and the New Developmental State* do indeed offer concrete examples of policy reform, which – in different degrees – confirm the validity of the more abstract notions (the “new functionalities” of the law). Such examples include those legal “flexibility”, “public-private” interactions, horizontal and vertical “orchestration”, and the legal promotion of transparency/social participation.

Although until the time of writing of the present article no specific analysis exists of broadband services regulation in Brazil under the NLD perspective, ideas are certainly in place to produce this analysis.

\(^ {33} \) See Trubek, Coutinho and Schapiro (2013).
\(^ {34} \) See Milhaupt & Pistor (2008, pp. 31-38).
5. THE LEGAL ANALYSIS OF ECONOMIC POLICY

5.1. The General Character of the LAEP Approach

The second major perspective on how law relates to economic processes and policy-making, as already mentioned, has been called the “Legal Analysis of Economic Policy” (LAEP). This theoretical and analytical perspective has engaged in the reconstruction of several legal concepts and notions – such as “legal right”, “property”, “contract”, “public policy and the law” – in order to aid in recasting legal discourse beyond a legal culture in which analysis of black-letter law is still largely prevalent, and in which a rift exists between policy-related legal discourse and ordinary (civil) law.35

LAEP work has therefore sought to provide to lawyers new categories of thought and analysis in order to help them render legally meaningful policy-related subjects and economic processes in general. The reconstructed legal categories of the LAEP perspective offer the basis for the development a two-level framework of analysis whose application to circumscribed empirical aspects of public policies can yield valuable critical assessments of many policy details and also offer legal grounds for policy reforms taking into account local realities and processes that entangle such realities in complex national, regional and global interdependencies.

In the following paragraphs a description will be given of the most important reconstructed categories of the LAEP approach. The two-level analytical framework of the LAEP approach will then be presented. Finally, elements of the LAEP approach will be used to analyze Brazil’s National Broadband Plan (NBP). The application of analytical resources of the LAEP approach to the NBP of Brazil aims to exemplify how the reconstructed categories of that perspective can be used to develop new kinds of legal arguments about policy.

5.2. Reconstructed Legal Categories

5.2.1. Legal rights

One of the legal categories reconstructed by the LAEP approach is that of “legal right”. Often a right is understood as an abstract entity claiming both moral sway and political pre-eminence. This conception of legal right has roots

35In Brazil, as indicated above, more conventional legal categories do not offer lawyers appropriate tools to analyze public policies. In fact, there are important discontinuities between policy-related legal discourse (as in administrative law) and ordinary (civil) law. Cf. Castro (2013) and Coutinho (2013). See also Bucci (2009).
in 17th and 18th century legal thought and is based on natural law philosophy as a prominent line of metaphysical speculation. A second meaning of “legal right” is that of a command uttered by a sovereign (the legislature, a leader, a technocracy, etc.). This latter meaning of legal right belongs to legal positivism. Sociological versions of legal positivism are also present in academic legal discourse and rely on some notion of noncontroversial social fact by reference to which the practical meaning of legal norms must be gauged.

The LAEP approach rejects both the metaphysical and the positivist conceptions of legal right. Instead, scholars working under the LAEP approach define a legal right as a discursive reference to a muddled field of moral and/or cultural controversy about certain kinds of interests. In this view, important, publicly acclaimed legal documents – above all, charters of rights incorporated into national constitutions, declarations of rights and international human rights treaties – acquire a deictic function, which points to a field of nationally and/or internationally prominent and unsettled debate, rather than to a definitely established and uncontroversial “source of law”.

Moreover, under the LAEP approach, the fulfillment or frustration of the interests to which legal rights refer are conceived as having a relational character. In other words, the enjoyment of a right is seen as dependent on performance of specific kinds of behavior on the part of individuals, groups or organizations to which a right holder (an individual or group) relates in the context of social life. Thus, for example, the enjoyment of the right to residential property by a home-owner is seen as dependent on the performance of certain patterns of behavior by individuals, groups and organizations such as: public security provided by the state, restraint form trespass by neighbors, several contractually hired services, including provision of water, electricity, etc. 36

Under the LAEP approach, therefore, the determination of the content of a right must be contextual and, in democratic regimes, must include the opinion of right-holders as to which relational expectations must be deemed covered by the effective enjoyment of a right. It follows that frustrated relational expectations are usually equivalent to perceived shortfalls in the enjoyment of legal rights.

5.2.2. Contracts and ideal-typical contractual clauses

New ideas about contracts and contractual contents are also advanced by the LAEP approach. In this perspective, contracts are considered legally enforceable statements of relational expectations. “Contractual contents” are taken as normative stipulations with legally binding force regarding: (i) utilities

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and services of the real economy and (ii) the transfer of money or other forms of liquidity. The latter belongs both to the web of contracts which by and large constitute the fabric of market economies and also to the so-called monetary dimension of the market economy. The binding force of both real-economy and monetary contractual contents under the LAEP approach is deemed a consequence of legally valid contract formation, amendment or termination.

Normative stipulations in contracts, which typically carry both utility contents and monetary contents, structure relational expectations recorded in contractual clauses and are a guide to relational performance. Moreover, under the LAEP perspective, contractual contents are either privately negotiated by the parties to a contract, or are “injected” into contracts by law from public deliberation: mainly from the legislative, administrative or judicial processes, or a combination of them. This includes, of course, statutes approved by legislators, decisions and policies adopted by regulatory agencies and case law produced by judicial courts.

5.2.3. Positional Analysis

One of the analytical instruments proposed by the LAEP approach is called “positional analysis”. A “position” of enjoyment of legal right results from the aggregate of expectations entertained by a right holder regarding relational performance as expressed in contracts. A plurality of contracts may form a portfolio. Portfolios are clusters of strategically interconnected contracts designed to offer investment and/or consumption opportunities that are played out by right holders. Positional analysis relies on analytical procedures which can be described as follows.\(^{37}\)

- **Selection of a right.** Depending on the analytical interest of the jurist, he or she will select which connections to make between “rights” and “policies” in light of a defined research interest.

- **Analytical breakdown of the relational contents of rights.** In this analytical task, the jurist is called upon to indicate what relevant patterns of social and institutional action are deemed necessary to the effective enjoyment of a right. In deciding what should be counted as actions or services deemed necessary for the enjoyment of a right, the jurist may work with a community of right holders\(^ {38}\) and/or look for guidance in legal materials (the “deictic” function of formal legal

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\(^{37}\) This section of the paper draws on Castro (2014).

\(^{38}\) See, e.g., Sabel and Zeitlin (2012).
norms), including relevant judicial argument and documents drawn from the international law of human rights.

- **Quantification of empirical enjoyment of a right in a narrowly circumscribed empirical situation.** Overall, quantification can profit from recent discussions on the measurement of human rights compliance and further innovations brought to this field.\(^3^9\) In order to accomplish this part of the analysis, the jurist may produce original data through direct measurement and/or may cooperate with government agencies or civil society or professional organizations to use existing data and databases. A quantified “index” of empirical effectiveness (IEE) referring to the enjoyment of a legal right may then be generated.

- **Quantitative definition of a “right fruition benchmark” (RFB).** Such definition results from incorporation of rights-holders’ claims and opinions about shortfalls in the enjoyment of a legal right under a participatory research project or under an experimentalist governance arrangement. The RFB elaborated as part of the exercise of legal analysis may also be developed from benchmark indications contained in statutes or other legal or technical materials, including those produced by international bodies and/or can be elaborated from indications provided by right holders.\(^4^0\) IEEs generated in comparative empirical research conducted in different districts of a city or in different countries (in case of national policies), and indicating drastic inequalities between districts in the fruition of a right, may also provide the basis for the elaboration of an RFB designed to diminish or suppress such inequality.

The use of numerical expressions in the form of the IEE and the RFB is meant to explore possibilities of adopting language closer to that of policy-makers as has emerged in recent legal literature.\(^4^1\)

\(^{3^9}\)See, e.g., Bakker et al. (2009).

\(^{4^0}\)Again see, e.g., Sabel and Zeitlin (2012).

5.2.4. Portfolio Analysis

The New Contractual Analysis (also called “Portfolio Analysis”) relies on some of the reconstructed legal categories already mentioned above in order to offer new insight into inter-contractual relations, which usually affect the enjoyment of rights. Under the LAEP perspective, all economically relevant contracts carry two ideal-typical clauses called: the “utility clause” (the “U clause”) and the “monetary clause” (the “M clause”). The former refer to real-economy contents (“U”), including real utilities and services, while the latter expresses monetary contents (“M”).

Moreover, each of such ideal-typical clauses is divided in two segments, in which are recorded separately public-interest contents and private-interest contents. The distinction between private-interest contents (U and M) and public-interest contents (U’ and M’) is procedural, as already noted. Thus an analytical template is generated (see Figure 1 below).

<table>
<thead>
<tr>
<th>U CLAUSE</th>
<th>M CLAUSE</th>
</tr>
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<tbody>
<tr>
<td>Private interest</td>
<td>U</td>
</tr>
<tr>
<td>Public Interest</td>
<td>U’</td>
</tr>
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</table>


Figure 1 – PORTFOLIO ANALYSIS TEMPLATE

By means of the Portfolio Analysis, jurists working under the LAEP approach can assess elements in the “contractual architectonics” which underlie the enjoyment of legal rights, highlighting the features relevant for price formation and for the transmission of price signals, which are described as interportfolio relay. The distribution of M’ (including tax charges/credits and policy-induced interest rates) throughout portfolios define the social structure of

42The following examples are taken from Castro (2011, p. 42-43): “Consider a contract by which a gallon of milk is purchased [by a consumer] in a supermarket. The gallon of milk itself must be [analytically] represented as U, while the price charged must be represented as M. If a public policy applies requiring the seller to provide nutritional facts on the label of the product that it sells, the corresponding contractual content must be represented in U’. Moreover, a sales tax collected by the seller must be represented as M’.”
both tax policy and monetary policy and offer a valuable analytical means to generate legal arguments about these topics insofar as they bear on the financial structure of portfolios affecting the empirical enjoyment of legal rights.

A major concern of jurists working under the LAEP perspective will be with the social and economic consequences of the relevant structures of portfolios and relay linkages among them, including those that tend to “freeze” or “lock-in” certain individuals or groups – or, for that matter, the inhabitants of whole regions – into certain “positions” within the national or the global economy. The freezing or lock-in effect is viewed as an outcome of “shortfalls” in the enjoyments of legal rights.43

6. APPLICATION OF THE ‘LAEP’ APPROACH TO SELECTED POLICY FEATURES OF BRAZIL’S NBP

6.1. An Exercise in Positional Analysis

In the paragraphs below, an analysis of some policy features of Brazil’s 2010 National Broadband Plan (NBP) will be offered as an example of the application of “positional analysis” to selected policy contents. Therefore, this application of positional analysis aims at exemplifying how new language and a new analytical approach that has emerged in Brazilian legal academia may be employed by lawyers engaged in the policy debate – in the present case, the debate on internet regulation in Brazil.

Following the methodology proposed by the LAEP approach, we selected the “right of access to information” as the legal right considered for the analytical exercise of application of “positional analysis”. This right is crucially implicated in the policy of Brazil’s PNB and is referred in Article 5, paragraph 14 of the Brazilian Constitution of 1988, currently in force.

43 Lock-in or “freezing” effect of portfolio architectonics often derive from financial contents of contracts. This is indicated in Castro (2014) as follows: “[F]inancial regulations (U’ in financial contracts) affecting different kinds of real-economy contracts and more generally the impacts of such regulations on prices of financial contracts – e.g., the impact of the so-called ‘capital requirements’ of the Basel Accords on bank spreads in different financial environments, as well as the possible ‘procyclical’ of the adopted Accord rules – all become subject matters of great interest to jurists [working in the LAEP perspective], since U’ in financial contracts can positively or adversely affect the ability of individuals or groups to negotiate, through contractual bargaining, their way out of unwanted positions within the economy. In themselves, unwanted positions, in which individuals or groups may become economically trapped or into which they, may become frozen, can be analyzed by means of positional analysis and usually are an indication of defective enjoyment of fundamental and human rights by affected right holders.”
Another analytical step of positional analysis is the “breakdown of the relational contents of rights”. Of course, this analysis can result from consideration of many different criteria as to what constitutes a relational content or expectation. Our analysis found it reasonable to adopt the following elements, since they are prominent policy features of Brazil’s NBP, as well as of comparable plans adopted by other countries:

(i) the **speed** of data transfer over the internet, as measured by Mbps,

(ii) the targeted social **coverage** of internet service provision, measured as percentage of total households in a given national territory, and

(iii) the **price** per megabit (Mb) of data transferred over the internet.

We considered these policy features as “relational contents” of the fundamental right of access to information, for purposes of our analysis.

The above relational contents were taken as the basis for the elaboration of a formula that expresses the general idea of a quantified *index of empirical effectiveness* (IEE) of the right of access to information of users of internet services. The general formula of our IEE is:

\[
IEE = \frac{S + (1/P) + C}{3}
\]

where \( S \) denotes “speed” of data transfer over the internet, \( P \) stands for “price” per Mb, and \( C \) denotes social “coverage” measured in percentage of total homes of a given national territory or region. This is also the general formula we adopt for our RFB (right fruition benchmark), which must comprise the same relational contents included in the IEE.

Empirical data on actually delivered speed, actual pricing of service and actual social coverage in Brazil were not readily available. We therefore considered the above general formula for the purposes of (i) expressing the components of our IEE (which we did not quantify) for internet users in Brazil in 2014, and of (ii) compiling a quantified RFB. We derived our quantified RFB for Brazilian internet users from a comparison of policy goals stated in official documents describing national broadband plans of four countries and regions.

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45Mbps (an acronym for “megabits per second”) designates the industry standard for speed of internet-based data transfer.
besides Brazil. Moreover, we included in our analysis demands expressed by Brazilian civil society regarding each of the policy features shown in our general IEE and RFB formula. We therefore considered data included in documents issued by Australia (National Broadband Plan), the USA (National Broadband Plan), Canada (Canada’s Economic Action Plan), the European Union (Digital Agenda for Europe), Brazil (National Broadband Plan) and Brazilian civil society in order to generate our RFB for the enjoyment of the right of access to information by Brazilian internet users. We also added, as an additional policy goal, the time frame of policy implementation stipulated by each of the sources we used. The data which we took from the sources indicated above are shown in Table 1 below.

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Speed (Mbps)</th>
<th>Price per Mbps (USD)</th>
<th>Coverage (% of homes)</th>
<th>Implemntn. timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia (National Broadband Plan)</td>
<td>≥ 50</td>
<td>1.80</td>
<td>90</td>
<td>2021</td>
</tr>
<tr>
<td>USA (National Broadband Plan)</td>
<td>≥ 100</td>
<td>N/A</td>
<td>80</td>
<td>2021</td>
</tr>
<tr>
<td>Canada (Canada's Economic Action Plan)</td>
<td>≥ 5</td>
<td>5.40</td>
<td>100</td>
<td>2015</td>
</tr>
<tr>
<td>EU (Digital Agenda for Europe)</td>
<td>≥ 30</td>
<td>N/A</td>
<td>100</td>
<td>2020</td>
</tr>
<tr>
<td>Brazil (National Broadband Plan)</td>
<td>≥ 1</td>
<td>15.2</td>
<td>70</td>
<td>2014</td>
</tr>
<tr>
<td>Brazilian civil society</td>
<td>≥ 10</td>
<td>4.3</td>
<td>90</td>
<td>2014</td>
</tr>
<tr>
<td>Average</td>
<td>≥ 33</td>
<td>6.67</td>
<td>88</td>
<td>2017</td>
</tr>
</tbody>
</table>

Source: Official broadband plans of selected countries and Pereira and Biondi (2012)

Table 1 – Policy Goals Stated or Demanded by Relevant Actors

Since the data for actual coverage, speed and price prevalent in the Brazilian telecommunications market were not readily available, we took the corresponding quantified policy goals appearing in Brazil’s NBP as the values to be used in the elaboration of a proxy for our IEE. A quantified index of empirical effectiveness was thus generated, which we took merely as a proxy for

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an index of actual effectiveness. Our proxy IEE (derived from the policy goals stated in Brazil’s NBP) is 23.68 (see formula 2 below).

\[ IEE = \frac{1 + (1/15.2) + 70}{3} = 23.68 \quad (2) \]

Next, taking the averages of the national data for each policy goal considered in our research, and also the related demands of Brazilian civil society, we elaborated a quantified RFB of 40.38 points (see formula 3 below).

\[ RFB = \frac{33 + (1/6.67) + 88}{3} = 40.38 \quad (3) \]

Thus we engaged in an exercise of application of Positional Analysis to selected policy contents that, under the LAEP approach, correspond to contractually expressed relational expectations. This analytical exercise offers the basis for the elaboration of mutually complementary policy reform proposals.47 Such reform proposals must focus on the policy details considered under Positional Analysis. In the present case, this would require adjustments made in broadband policy related to speed, price and coverage of internet services in the Brazilian telecommunications market so that empirically verifiable quantified effectiveness be made to reach the benchmark of 40.38 points (see formula 3).

Moreover, under the LAEP approach, reforms must aim at securing the empirical fruition of a fundamental right, which always occurs locally. Therefore, the jurist working under the LAEP perspective may have to consider a chain of reforms from-the-bottom-up, connecting policy reforms projected sequentially at the local, national and international or global levels, if necessary.48

Since bottom-up chains of projected reforms often are attempts to deal with inter-contractual monetary linkages (interportfolio relay), they benefit from analytical inputs deriving from Portfolio Analysis. In the paragraphs below an exercise in Portfolio Analysis applied to the issue of policy-induced price levels of internet services will be offered. Its aim is, again, to illustrate how new kinds

47 On the concept of “mutually complementary policy reform proposals” see Castro (2014).
48 Idem. Indeed, research on “resistance” and “foiling” in processes of “intermediation” of transnational policy diffusion illustrates how the influence of local interests often bear on norm formation applied to different policy areas. See, e.g., Hallyday and Carruthers (2009) and Shaffer (2013).
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of legal arguments may be produced in policy-related matters in the context of revived state activism, as exemplified in recent Brazilian experience.

6.2. An Exercise in Portfolio Analysis

As indicated above, Portfolio Analysis may be useful in producing analytical insights into the influence of tax policy and of monetary policy on the enjoyment of legal rights. In the case of the analysis of price-setting of broadband service in Brazil, it was indicated (see section 6.1. supra) that comparison of price goals pursued by different actors (governments of selected countries, as stated in their respective NBPs, and demands by Brazilian civil society) yielded a maximum price of US$ 6.67 per Mb of transferred data as a benchmark to guide policy reform. This price contrasted with US$ 15.2 per Mb adopted under Brazil’s 2010 NBP. Thus, under the LAEP perspective, reform recommendations would have to be advanced regarding the financial setup of investment in broadband services in Brazil that would contribute to reduce the targeted price level approximately by half.

The adoption of a US$ 6.67 per Mb as a pricing benchmark for the provision of broadband services in Brazil could be achieved through competition in which the Telebras holding company would offer service at that price. After all, Decree no. 7,175 of 2010, which instituted Brazil’s NBP, defined a very broad strategic mandate to be fulfilled by Telebras.49

Several aspects relevant to financing of investment in the sector of internet services could and should be considered with regard to such strategic mandate of Telebras. In order to illustrate how financial variables should be looked into under the LAEP perspective, in the aspect highlighted above, we considered specifically the access to credit in the countries or regions included in our sample indicated in Table 1 above. Given that at this stage we are only interested in demonstrating how new policy-relevant legal arguments can be elaborated based on reconstructed legal categories of the LAEP approach, we did not focus on other aspects of financial conditions affecting investment in the different economic environments referred to in our country and region sample.

The provision of broadband service to 88% of Brazilian homes at the minimum speed of 33 Mbps and at the maximum price of US 6.67 per Mb (see

49 Decree no. 7,175 of 2010 delegated power to the Telebras company to: (i) implement a communications network to be used exclusively by the federal government, (ii) support and promote internet broadband connection policies for universities, research centers, schools, hospitals and other public-interest internet connection facilities, (iii) produce network infrastructure and build networks for support of services provided by private companies, local governments and non-profit organizations, and (iv) provide broadband internet access to final users in localities where such service is lacking (i.e. where internet access is not available through regular market channels).
Table 1 and formula 3), would require new investments for which adequate financing would have to be provided. Much discussion around to use of earmarked fiscal revenues known as the Fund for the Universalization of Telecommunications Services (FUTS), established in 2000, has motivated a heated debate on how to provide new and affordable financing to investment in the “universalization” of access to broadband services in Brazil.  

The FUTS matter so far is not politically settled. Perhaps a less controversial aspect of finance provision for investment in broadband “universalization” would be access to affordable credit. In this case, looking at the different interest rates available in the markets considered in our country and region sample (Table 1) can be helpful. Table 2 shows central bank policy rates for the countries in our sample and also in the Euro area.

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
</tr>
<tr>
<td>Euro area</td>
<td>1.00</td>
<td>1.00</td>
<td>0.75</td>
<td>0.25</td>
<td>0.05</td>
<td>0.61</td>
</tr>
<tr>
<td>Canada</td>
<td>1.00</td>
<td>1.00</td>
<td>1.25</td>
<td>1.25</td>
<td>1.25</td>
<td>1.15</td>
</tr>
<tr>
<td>Australia</td>
<td>4.75</td>
<td>4.30</td>
<td>3.03</td>
<td>2.50</td>
<td>2.50</td>
<td>3.41</td>
</tr>
<tr>
<td>Brazil</td>
<td>10.75</td>
<td>11.00</td>
<td>7.25</td>
<td>10.00</td>
<td>11.75</td>
<td>10.15</td>
</tr>
</tbody>
</table>

Source: International Monetary Fund (2015)

Table 2 – Central Bank Policy Rate (percent per annum) for Selected Countries and the Euro area

It can readily be seen that as a benchmark for credit generally – thus including for investment and/or working capital used in the implementation of BNPs and “universalization” of access to broadband service – policy-induced interest rates are much higher in Brazil than in the countries and region included in our sample. The average central bank policy rate in all other countries considered, in the period between 2010 and 2014, has been 1.15%, whereas this average is 10.15% in Brazil. Even if one considers special credit facilities available for industrial development projects through Brazil’s powerful National Bank for Economic and Social Development, interest rate averages will be

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50 This debate has been sparked in part by wording used in a ruling adopted in 2005 by the Brazilian federal accounts court known as Tribunal de Contas da União (TCU). See Tribunal de Contas da União (2005). See also Faraco (2009, pp. 64-101).

51 See, e.g., Bill no. 5116 of 2009, which proposes that resources from the FUTS be channeled to build broadband infrastructure for internet-based medical services provision under the national public health system, and Bill no. 6585 of 2009, which aims to allow the use of funds from the FUTS to create subsidies in favor of low-income consumers of telecommunications services.

significantly higher as compared to rates prevalent in most “developed” countries (see Table 3 below).

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil-LTIR</td>
<td>6.00</td>
<td>6.00</td>
<td>5.57</td>
<td>5.00</td>
<td>5.00</td>
<td>5.51</td>
</tr>
</tbody>
</table>


Table 3 – Long-term Interest Rate (LTIR) (percent per annum) – Brazil’s National Bank for Economic and Social Development

The application of Portfolio Analysis to the financial aspects a broadband policy in Brazil would thus consider the influence of interest rate differentials available for working capital and/or investment in the attainment of conditions under which the right of access to information can be properly enjoyed by internet users in Brazil under Brazilian jurisdiction. The use of the analytical template already shown above (see Figure 1), adapted to reflect contractual contents compatible with our RFB (see formula 3) would indicate a distribution of contents in contractual clauses of an analytical (ideal) investment portfolio approximately as they appear in Figure 2 below.

The analytical portfolio of investment in broadband services with contractual contents indicated in Figure 2 is thus another example of the new legal arguments considered in Brazilian academia to address policy issues – in the present case, policy features of the National Broadband Plan adopted in Brazil in 2010.

<table>
<thead>
<tr>
<th>U CLAUSE</th>
<th>M CLAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Private interest</strong></td>
<td><strong>(U)</strong> Privately negotiated characteristics of broadband service</td>
</tr>
<tr>
<td><strong>Public Interest</strong></td>
<td><strong>(U’)</strong> Mandatory minimum speed = 1 Mbps</td>
</tr>
</tbody>
</table>

52This analytical topic responds to concerns of lawyers working unde LAEP perspective, for whom, as put by Castro (2014, p. 51), “large international disparities among (...) interest rates become a prominent topic of legal research and debate since such disparities are indications that the capability of businesses in high-interest rate economies to compete internationally is impaired.”.
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7. FINAL REMARKS

Seldom has legal discourse in Brazil been explicitly used to promote economic development and social inclusion. A first period in which legal arguments were elaborated in line with economic ideas employed to catalyze fast industrial development and growth in Brazil was in the decades spanning from the 1930s to the 1980s. This period became known as the old-developmentalism phase of policy-making in Brazil. It was the period when legal doctrines adapted from contemporaneous French administrative law (droit administratif) were elaborated by Brazilian jurists and were offered by them as legal instruments useful to promote policy coordination and to structure state-led investment.

From the 1990s throughout the early 2000s, several political and economic conditions prompted the adoption of sweeping reforms that by and large relied on ideas rooted in neoclassical economic thought. This was the period in which far-reaching, pro-market reforms were adopted along the lines advocated by international financial institutions such as the World Bank and the International Monetary Fund and reflected what became known as the “Washington Consensus” or the “neoliberal reform agenda”.

Since the mid-2000s, Brazilian governments began to engage in practices by which policy design and implementation no longer reflected a purely market-based view of policy reform. In that same period, lawyers began to produce arguments that did not attempt to revive legal doctrines typical of the old-style developmentalism, but to reform the markets often in order to promote both economic efficiency and noneconomic goals, such as equity.

In the present article we described two major lines of articulation of legal discourse which have developed since the mid-2000s. We have shown how these arguments become relevant in the analysis of regulation, focusing on the regulation of broadband services in Brazil.
A first line of recent legal discourse has been developed in connection with a perspective called “New Law and Development” (NLD). Work produced by lawyers under the NLD perspective has attempted to factor into legal analysis ideas taken from development economics and from critical legal studies and socio-legal studies. Their analytical insights enable them to consider new roles – called “functionalities” – of the law in coordinating policy and shaping several aspects of markets.

A second line of recent legal discourse addressed in the present paper was that which became known as the “Legal Analysis of Economic Policy” (LAEP) perspective. This approach to legal analysis proceeds from the reconstruction of basic legal categories – such as those of legal rights and contracts – in order to enable lawyers to analyze several aspects of regulation and economic policy, including real-economy and monetary aspects of such policies. The above application of the LAEP approach to internet broadband regulation generated insights and reform prescriptions based on two complementary analytical frameworks: positional analysis and portfolio analysis. The application of these analytical frameworks to selected policy areas of broadband regulation in Brazil enabled us to demonstrate how new legal arguments about specialized issues such as data transfer speed, social coverage of service and price-setting could be handled in novel ways by legal discourse.

Our work has therefore provided illustrations of how legal discourse has been developing in Brazil, pointing to new ways in which legal arguments can be employed as relevant components of policy reform.

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**News organizations**


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