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# Network Industry Regulation: Between Flexibility and Stability

# Alexandre Ditzel Faraco & Diogo R. Coutinho<sup>2</sup>

This article discusses some challenges of network industries regulation. We argue that certain economic activities (such as telecommunications and the distribution of electric energy, gas, and water)—the performance of which necessarily depends on the use of physical infrastructure (networks)—have characteristics that require a regulator to maintain highly stable rules in order to avoid harming the end users that the regulation intends to protect. Such stability is important in the developed world, but is even more important in developing countries such as Brazil because of severe restrictions on public spending and a serious lack of infrastructure, the building of which requires private capital.

We argue, however, that stability in the rules and decisions regarding regulatory policy should be accompanied by mechanisms that allow for flexibility and the capacity to adapt to new situations. In practical terms, it is necessary that there be a place for changes that are driven by, among other factors, technological change and an increase (or decrease) in the degree of competitive rivalry among the economic agents that use the networks. Additionally, changes forwarded by legitimate political demand (equity arguments, for instance) should also be considered, being in all cases necessary to evaluate the pertinence of such changes in face of the regulatory regime.<sup>3</sup> In this context, we maintain that there should always be awareness about the possibility of undesired or counterproductive effects from regulatory action, regardless of how good the underlying intentions are. This tension between flexibility and stability is illustrated with our

discussion of the 2004 Brazilian legislative proposal to eliminate payment of subscription to fixed-line telephone service.

This article is divided into five parts. The first two parts offer a theoretical discussion regarding changes in long-term regulatory commitments and the need for institutional stability. Part I specifically deals with the idea of regulatory commitment. It establishes a basis for understanding that there is a reasonably identifiable moment in which a good part of the rules of the game for private investment and regulatory action are defined. Additionally, part I explains the frequently conflicting demands that are placed upon the regulator in his role as a mediator of interests. Part II references the literature regarding the counterproductive or paradoxical effects of regulation with an emphasis on the need to consider regulation's function in an adequate balance between means and ends.

The final three parts of this article discuss the theoretical background and how it will be employed to analyze the regulatory commitment challenge in Brazil. Specifically, this article analyzes the anticipated effects and implications of a draft statute that substantively changes the initial terms under which fixed telecommunications services have been transferred to private companies. Part III describes the draft statute, which is designed to end fixed-line telephone monthly subscription payment. In Brazil, the user of a telephone line usually has to pay a monthly fee to have the service available, and that includes a certain number of minutes of local calls. Besides this fee, the user has to pay a separate per-minute rate for long distance calls and local calls that surpass the minutes covered by the monthly fee. Furthermore, a one-time installation or hookup fee is also charged when the line is initially installed in the user's home. The proponents of the draft statute argue that the monthly fee-which is charged even if no calls are made-hinders the capacity of low-income citizens to have a fixed-line telephone at their homes. Therefore, the proposal was made to tackle universal service challenges.

We argue that the legislative proposal is a highly uncertain means to reach that end. Under the existing regulatory commitment, if the draft statute was approved, the recently privatized telephone company would be entitled to increase the per-minute rate or the installation (hookup) fee. If this provision is enforced, the change could actually limit access to telephone lines and use of the service. In order to avoid this undesired effect, the regulator could be tempted or pressed to ignore a provision central to the current regulatory commitment. Also, the regulator could either refuse to respect the right of the private company or significantly delay the procedure that would lead to the increase in the per-minute rate or the installation fee. But this would create serious instability that would hinder future investments in the telecom sector and, as a consequence, would also limit access to fixed telephone lines and use of the service.

Next, part IV briefly presents some suggestions that should have been considered in order to achieve, with certainty and transparency gains, the same goals—as compared to the proposal to end monthly subscription fee—but which would not also be seen as a possible source of conflict with the regulatory commitment. Finally, part V summarizes this article's conclusions.

#### I. PRIVATIZATION AND REGULATORY COMMITMENT

In the 1990s, because of economic and political constraints,<sup>4</sup> many developing countries took advantage of privatization as a way to attract private capital and regain their ability to invest in infrastructure.<sup>5</sup> The state enterprises that were sold were then valued on the basis of expected future profits, which made it possible to estimate their net present value.<sup>6</sup>

The "present value" of the company, in turn, was estimated in light of the compulsory investments (required as part of the consideration for the acquisition),<sup>7</sup> which would reduce the maximum amount a buyer would pay for the company. In other words, the investments that the government required the buyer to make were taken into consideration when deciding

how much to bid at auction.<sup>8</sup> The same can be said of expectations of future profitability for an enterprise associated with a public service, the calculation of which considers regulatory action and supervision by the governmental body with authority over the sector.

In this context, the circumstances in which the privatizations took place in Brazil in the 1990s,<sup>9</sup> and the economic calculations made in the auctions, were forward looking. That is especially true for concessions or licenses to provide public services, the timelines for which are generally long—twenty, twenty-five, or thirty years.<sup>10</sup> Cumulatively, the circumstances of privatization have a determinative effect in private investment, in its profitability projections, and in the design of long-term regulations that are of limited flexibility because of the long-term concession contracts or licenses.

It is also relevant to explain some characteristics of network industries, which provide an array of public services, such as water, sewage, electricity, and gas.<sup>11</sup> These industries are capital intensive, demanding large scale investments, and have substantial sunk costs. They present significant economies of scale, they generate consumer externalities, and they "hook" their users—i.e., the user of the service does not easily change its supplier.

Further, these networks often exemplify the concept of a natural monopoly: operating a single company is more efficient than any other market structure because of underlying economies of scale.<sup>12</sup> Finally, such providers face the challenge of permanent expansion not only in physical terms, but also with respect to the possibility that many citizens live in remote areas and/or live with a low income, which is a prevalent situation in Brazil. Therefore, public services face the difficult task of universal service coverage.

If private companies controll these network (or public service) industries, their regulation must ensure that consumer demand is met at the same time as investors make a reasonable return. Such a task is not easy. First,

investors must be encouraged to pass along the benefits of productivity gains and technological and managerial innovations to consumers. Furthermore, regulation must seek a sort of "optimal point" at which the rates paid by consumers are as low as possible without prejudicing returns that private investors will consider adequate. These events do not happen in a vacuum; underlying the regulatory action is almost always a concession contract or license that, together with the regulation, makes up the nucleus of this long-term commitment.

Another characteristic of network industries is that, in most cases, consumers cannot simply decide to switch service providers. Because of the natural monopoly characteristics noted above, or because competition is only incipient, there is no way out for the consumer; if the consumer is unsatisfied, he or she can only complain to the regulator or courts and wait for these to take action.<sup>13</sup> Private investors, for their part, must make large-scale, sunk and long-term investments;<sup>14</sup> therefore, they will be concerned about the risk of their assets and future profits being expropriated, directly or indirectly, by the government, which may expropriate either opportunistically or with good intentions.<sup>15</sup>

If private investors suspect that there will be any type of expropriation, they will immediately suspend or delay their investments in order to avoid losses or to pass their losses on to consumers—the hold-up effect.<sup>16</sup> The risk or the implementation of regulatory measures that are identified with the expropriation of assets or profitability increase the risk premium that investors demand for taking on a concession or license.<sup>17</sup> This is especially true in developing countries where conditions for private investment in infrastructure are deemed, in general, to be more risky than in developed countries.<sup>18</sup>

During the privatization process, there appears to be a point when the rules of the game are defined and subsequently crystallize. This moment can be fairly well-identified for each regulated sector. At that moment of crystallization, something referred to in the jargon of regulation<sup>19</sup> as

"regulatory commitment" forms between a government and private investors. It is a sort of initial agreement that, while not immutable, can only be amended through consensus. Such changes must be made at an appropriate time and should never be implemented extemporaneously.

Many developing countries, including Brazil, largely defined the terms of their regulatory commitment, although not definitively, during the process of privatizing their state-owned companies.<sup>20</sup> The terms of the acquisition and the investments requirements were generally stated in the requests for bids (or equivalent documents in the privatizations) or, if some regulatory structure had already been created, in rules published by the agency or ministry in charge of the sector.<sup>21</sup>

Because of the financial, fiscal, and economic difficulties faced by governments, maximizing the sale price in the auctions—which almost always meant short-term gains that would be used to pay down the public debt—sometimes overshadowed the more careful planning for investments required for the long term.<sup>22</sup> That, coupled with requirements for adaptation that could not have been anticipated by the parties involved, led to the current situation. Currently, regulatory rules are subject to change initiatives that reach to the heart of the regulatory commitment (i.e., to the expected return of the private investor, estimated when he or she decided to make the investment and in view of the regulations then in force).

It is understandable how an abrupt change to the regulatory commitment, either by the government or a private company, is a risk for the regulation of public services. Besides the legal consequences that can result from an abrupt change to a concession contract or license (or from the concessionaire's or licensee's failure to fulfill it), there are powerful symbolic effects in countries that are dependent on foreign capital entering the country and (even more dependent) on capital staying there.<sup>23</sup> A threat to change the rules of a game that is already being played can signal a lack of commitment. In other words, certain regulatory measures can affect

private investors' risk perception. That, in turn, affects present and future investments in other sectors.<sup>24</sup>

When a regulatory compromise is not sufficiently clear or when there is a threat it will crack, openings for post-contractual opportunism are created for both sides. When an investor foresees institutional instability, there can be underinvestment or hold-up effects. There are also frequent rate increases to pass on costs because it is difficult for private companies to absorb such losses.<sup>25</sup>

Parker and Kirkpatrick<sup>26</sup> mention an example from South Africa where, in April 2001, the concessionaire Siza refused to make a previously agreedupon payment to the municipality, alleging that the financial results had been disappointing.<sup>27</sup> According to the terms of the contract, the municipality could have retaliated with a stipulated fine.<sup>28</sup> However, because of the obvious lack of an alternative concessionaire, prices had to be increased 15 percent to return Siza to profitability.<sup>29</sup>

In summary, present regulation operates in a limited way when it seeks to change the terms of the regulatory commitment agreed upon and crystallized in the past. If this is correct, the casuistic or populist treatment of rate adjustments means a jolt to the regulatory commitment. This can, to the harm of everyone, lead to the suspension of private investments or, because of the increased perception of regulatory risk, can lead to an undesirable increase in the service rate or a delay in the fulfillment of investment obligations and quality commitments.

Such conclusions, however, must be treated with caution when dealing with regulatory changes that are based on legitimate initiatives within the framework of the democratic game. Proposed changes to the law or to policy guidelines for a sector should not be summarily presumed to be "populist," "opportunistic," or "casuistic." They may be perfectly legitimate, although in some cases inappropriate. Once again, this point illustrates the tension between stability and flexibility.<sup>30</sup>

#### II. COUNTERPRODUCTIVE REGULATION

Regulation of economic activities may bring undesirable results because it can be a form of counterproductive intervention in the dynamic functioning of the market. A neo-liberal economist would take the extreme position of asserting that almost all regulation of the market is counterproductive, and that if a market is free from public intervention it will adjust and regulate itself. It is not surprising, then, that there are abundant discussions of the paradoxical effects of regulation in relevant literature.<sup>31</sup>

There are numerous examples of undesired (or counterproductive) possible effects in the field of regulation, as well as in the field of law in general. For example attempts to control automobile pollution with rules that limit the emission of carbon dioxide will likely increasing costs and, as a result, may induce drivers to continue using their older, more-polluting cars. Attempts to reduce pollution levels with regulations can also cause more pollution when equally polluting products are substituted for those that are meant to be eliminated.<sup>32</sup> Rules to protect minorities, and affirmative action policies in general, can be harmful to minorities if they exacerbate hatred and intolerance.<sup>33</sup> Also, a rule that is intended to avoid a particular socially undesirable result frequently acts as a self-fulfilling prophecy or as a perverse incentive against compliance.<sup>34</sup>

Some argue that social regulation—the imposition of unprofitable investment targets in public services and rate adjustments that do not entirely reflect the costs in a sector, for example—is a form of distributionist policy that can cause collateral inefficiencies.<sup>35</sup> This line of argument maintains that when those inefficiencies are quantified and added together, the detrimental result is larger than the intended benefits of the regulation.<sup>36</sup>

Well-meaning regulation can also lead to reactions of "creative adaptation," where the agent subject to regulation seeks to avoid the incidence of the rule; or "creative compliance," where the agent subject to

regulation obeys the rule, but does so in a way that mitigates its effects.<sup>37</sup> Many believe that the markets simply "adjust" the burdens that state intervention brings so that, in the end, the results may, once again, be the opposite of those desired.<sup>38</sup>

The proposal to end the monthly subscription fee for fixed-line telephone service in Brazil is a recent example of an attempt to impose regulations in the telecommunications sector that, although well-intentioned, legitimate, and intended to benefit low-income citizens, could produce undesired effects. We will discuss this proposal in the remaining sections of this article.

## III. THE PROPOSAL TO END THE MONTHLY SUBSCRIPTION FEE AND THE REGULATORY COMMITMENT IN THE FIXED-LINE TELEPHONE SERVICE CONCESSION CONTRACTS IN BRAZIL

In 2001, Representative Marcelo Teixeira (PMDB-Ceará) presented to the Brazilian federal legislature Bill 5.476/01, which would modify the General Telecommunications Law.<sup>39</sup> The bill proposed removing subscriptions as a chargeable item for a fixed-line telephone service. As noted by Representative Teixeira, the high fees that the fixed-line telephone companies charge make it difficult for low-income consumers to afford access to the service. Representative Luiz Bittencourt, the reporter for the House of Representatives Committee for Consumer Defense, the Environment, and Minorities, issued a favorable report on the bill and emphasized that the cost of the monthly subscription has gone from R\$0.65 in 1995 to an average of R\$30.00 today.<sup>40</sup> The bill proposed amending Article 103 of the General Telecommunications Law so that it reads: "(3-A)-For telephone calls made by means of fixed-line telephone service provided in the public regimen, the subscriber will pay only for the time actually used."41

The representative presents the following justification:

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[W]ith the purpose of ensuring less fortunate consumers access to telephone service, we present this text, which establishes for the regulator the definition of a basic plan in which the rate is made up of the time actually used by the subscriber only, in this way protecting the customer who makes a small number of calls. In light of the importance of ensuring universal service, not only by offering a telephone line, but through conditions for its actual use, I call on my illustrious colleagues to support this bill.<sup>42</sup>

Eliminating the subscription fee for fixed-line telephone service in this way is legitimate inasmuch as it arises out of the democratic process. However, the possible results are no small matter: it could create a rupture of the regulatory commitments in the telecommunications sector, which could then lead to the deleterious effects described earlier, such as the hold-up of future investments. The subscription fee currently corresponds to an expectation of revenue on the part of the concessionaires, and that revenue is guaranteed in the concession contract.<sup>43</sup> It does not merely arise from a unilateral decision by the concessionaires, but is part of the rate policy framework established by the regulator itself.<sup>44</sup>

The fixed-line telephone service concession contracts in the regulator's local modality expressly contemplate the possibility of a periodic charge (subscription) as consideration for simply maintaining the user's access.<sup>45</sup> According to Exhibit III to these contracts, which describes the local basic service plan that must be offered by the concessionaire, the following are allowable rate items: a hookup charge, which can be charged when the user obtains access to the service by receiving a dedicated line; a subscription charge, to be paid monthly to maintain the right to use the service; and a use charge, which is based on the length of the calls.<sup>46</sup>

The maximum amount that the contracts establish for each of these components obviously considers the total revenue that the concessionaire can earn.<sup>47</sup> The per-minute charge for telephone use was established at a given level with the expectation that the concessionaire would also have revenue from both hookup and subscription charges. Not considering any

one of these items during the preparation of the concession contract would imply an increase in the amounts attributed to the other items.<sup>48</sup>

Viewed from this perspective, the proposal to eliminate subscriptions could, in practice, be innocuous or even counterproductive in regard to its goals, thus creating an undesirable situation of regulatory instability. The reason is that the fixed-line telephone concession contracts have clauses stating that the economic-financial equilibrium of the contracts will be maintained, which is normal for contracts governing this kind of relationship with the government.<sup>49</sup>

Properly understood, this clause should not be seen as a guaranteed return on investment, which experience has shown to be rather inefficient. What is provided for, instead, is the preservation of certain minimum conditions, existing at the moment the contract is signed, that afford a private agent a certain degree of foreseeability regarding the long-term relationship the agent is entering into. It is in this sense that we stated above that the clause contains, to a large extent, the heart of the regulatory commitment.

This reservation is important insofar as there is no reason to derive from this guarantee an absolute assurance of the immutability of the initial concession conditions. That is because Brazilian administrative law traditionally attributed such a guarantee to clauses regarding the maintenance of economic-financial equilibrium.<sup>50</sup> This practice arose from the type of regulation that was adopted for public services—a regulation based on public monopolies, the rates for which were established in light of the regulated company's total costs, plus a rate of return on the capital invested.<sup>51</sup>

Under such regulation, the concessionaire could intend to ensure a minimum return on its investment and, depending on the case, could require a revision to the rate structure if it was not achieving that return for a reason that could not be directly imputed to the concessionaire.<sup>52</sup> In that case, if the government were to decide to change certain conditions for the

provision of the service, it would be expected to change the rate structure in such a way as to preserve the concessionaire's expected return.

However, it is apparent that continuing adherence to that perspective is improper. This is especially true in contexts in which the services have come to be provided in a competitive environment, such as mobile telecommunications, gas, and electricity distribution. The current regulatory model for the telecommunications sector has abandoned the practice of setting the fee based on a calculation of costs and a guaranteed rate of return to the concessionaire, just as it has broken with the monopoly structure.<sup>53</sup> It is therefore necessary to adapt the application of the guarantee of economic-financial equilibrium to this new scenario, recognizing that the regulation has become more flexible in this realm.

In the current fixed-line telephone service concession contracts, despite the reference to a guarantee of economic-financial equilibrium, the possibility of any contractual change resulting from changes in market conditions, and changes that result from the concessionaire having to face competition from other companies, is expressly excluded.<sup>54</sup> Thus, losses arising from diminished market share, which results from the entry of new competitors, cannot be reimbursed through revision of the terms of the concession or of the rate structure and cannot be the basis for a request for indemnification from the government. Therefore, there is a necessary degree of uncertainty and a component of risk implicit in the economic return that the service provider will receive, as is made clear in the concession contracts.<sup>55</sup>

The concession contracts clearly rule out any attempt to recompose the rate structure due to changes in market conditions.<sup>56</sup> One clause is even more explicit in stating that "the concessionaire's losses or reduction in profits due to the uninhibited provision of the service in competitive conditions or due to inefficient management of its business will not be taken into account in the revision of the rate structure."<sup>57</sup> Additionally, the concession contracts expressly state that the concessionaire will not have

the right to any form of exclusivity and cannot claim a right regarding new providers of the same service, in the public or private domain.<sup>58</sup>

It is important to understand that changes in market conditions, which are excluded from the protection contained in the contract, are not limited to situations where new concessions or authorizations for fixed-line telephone service are granted by ANATEL.<sup>59</sup> The change in competitive conditions can result from price movements or technological innovations that allow consumers to replace fixed-line telephone service with services that serve analogous functions for the same price or less.

In Brazil, one can already observe the replacement of fixed-line telephone lines with prepaid mobile phones because it is common for people with limited means to only have a mobile phone.<sup>60</sup> More recently, technological changes have made it viable to offer Internet telephone services (VoIP) on a large scale, including in more profitable market segments such as business customers.<sup>61</sup> In these two situations, the concessionaire has no right to request a rate revision under the terms of the contract. Any market loss would be within the normal ambit of risk for a business activity carried on in a competitive marketplace. The possibility that a business will be affected by innovations developed by others that reduce costs for, or offer new services to, consumers is an integral part of any competitive economic environment.

In this context, the concession contracts, and the flexible manner in which they conceive of the question of economic-financial equilibrium, simply reflect the system introduced by the General Telecommunications Law. Under this system, the imposition of a public law service regimen for some operators does not change the fact that what is intended, for the sector as a whole, is to create a competitive environment that includes agents that act in the public law regime.<sup>62</sup>

It is, therefore, undeniable that the traditional framework under which public services (particularly telecommunications) were rendered was adapted to the influences that mark the new way of regulating the sector.

This can be seen both in the ambit of the relationship between the operators, in which the intent to encourage the development of market mechanisms is clear, and in the rules that establish the relationship between the government and the concessionaires.<sup>63</sup> In each of these frameworks, there is greater flexibility compared to the rules that traditionally governed private agents acting as suppliers of utility services.<sup>64</sup> This can be seen in the method that governs the guarantee of economic-financial equilibrium.

However, these observations do not mean that consideration of the economic-financial equilibrium is irrelevant in the current concession contracts. On the contrary, there are express terms in the contracts that aim to preserve certain conditions in existence at the moment of contracting, as described above, even though the terms do not provide a broad right to review the initial economic-financial equation of the contract.<sup>65</sup>

Although the concessionaire's right does not include situations that result from changes in market conditions, it undeniably includes situations in which a larger or additional burden arises from the government's unilateral imposition.<sup>66</sup> This is clearly established in the contract.<sup>67</sup> The purpose is to offer a minimum amount of security, which investors require before they are willing to justify the considerable investments related to the concession. Operating in a competitive market always presents risks for the businessperson; it is the presence of these risks that forces the businessperson to seek greater efficiency and quality in order to earn a profit and not lose market share. Because the choice was made to break with the old monopoly system in the telecommunications sector,<sup>68</sup> it would be senseless to protect private agents from the risks inherent in any economic activity carried out in a competitive environment. On the other hand, it is appropriate to protect the businessperson against changes that could be imposed by a unilateral government decision rather than by the market itself.

An increase in the universal service burdens placed on the concessionaire—beyond those already established at the beginning of the

concession—is an example of a situation in which the concessionaire must be guaranteed some kind of compensation, and that compensation occurs through access to resources from the Fund for the Universalization of Telecommunications Services (abbreviation in Portuguese: FUST).<sup>69</sup> Likewise, prohibiting a subscription charge could lead to a request for a rate revision where the lost revenue would be compensated with increases in the other rates.

If the economic-financial equilibrium clause in the concession contract is respected, and if the proper rate-adjustment procedure is followed after a subscription charge period has legally ended, the probable consequence would be an increase either in the per-minute rate or in the hookup fee. For the per-minute rate, it is possible to imagine that the bills of those individuals who do not use all of the minutes included in the subscription (and who, in theory, would benefit from subscriptions being ended) would go back to paying about the same amount as they were with subscription service, with the exception of consumers who use the telephone mainly to receive calls. In regard to the remaining consumers, it is not improbable that their telephone bills would increase because of the more expensive perminute rate. On the other hand, if the adjustment were made to the hookup fee, ending the subscription could have the paradoxical effect of making access to the service even more difficult.<sup>70</sup>

One might argue that, in view of the fact that the right to a rate review is clearly foreseen in the concession contract, the proposal should not be seen as a rupture of the regulatory commitment. The legislators could be seen as simply trying to modify the rate structure of the service (but not the revenue of the companies), creating a more efficient scheme under which no major impact would be imposed on the concessionaires since the concessionaires would be entitled to a revision of the per-minute rate or the hookup fee.

There are, however, circumstances demonstrating that this argument is misconceived. First, there was no inquiry or evaluation reported by the proponents of the draft statute regarding the price structure of the service.<sup>71</sup>

They did not show any concern regarding the efficiency of the rate formula foreseen in the concession contract, and their rhetoric pointed broadly to equity and distributional issues, making a general claim that rates were too high. The implicit result of that claim is admitting the possibility of a mandatory transfer of wealth from the private companies to low-income users.<sup>72</sup>

Second, if they admitted the possibility that other components of the concessionaire revenues could be subject to an increase, it would be reasonable for them to have foreseen it in the draft statute. However, the draft merely changes the law in order to forbid the subscription fee.<sup>73</sup>

But most importantly, as suggested in the paragraphs above, a revision of the per-minute rate or the hookup fee could lead to effects that are the opposite of those anticipated by the draft statute, creating uncertainty as to how the regulatory agency would respond to a request for rate revisions by the concessionaires in a political scenario supporting the draft statute.

These circumstances and uncertainties were clearly perceived by the private companies as an attempt to challenge the regulatory commitment.<sup>74</sup> The revision of the per-minute rate or the hookup fee would depend on a future regulatory procedure before ANATEL. The result of that could be unfavorable to the concessionaires, considering that ANATEL would face significant pressure from legislators once legislators understood that the intended long-term practical effects of the proposal to prohibit subscription fees would require impeding the application of one of the key sections of the concession contracts. Furthermore, even if the concessionaires' right was enforced in the end, this sort of procedure tends to be time-consuming and lengthy, and would comprise a period in which the concessionaires would have no compensation for their loss in revenue.

If ANATEL were to choose not to enforce the right of the concessionaires, the decision would certainly cause an even more unstable situation in the sector and would probably hold back new investments and lead to a conflict between the regulator and the regulated companies. This,

in turn, would affect the fulfillment of other obligations contained in the concession contracts, such as those regarding the universal scope and quality of service.

At most, in such an unstable situation (as is discussed in Part III), it is possible that a threat from the regulator to terminate the concession and grant it to a third party might not be a sufficient stimulus to avoid a conflict in which the concessionaire reneges on its obligations—it would be difficult, after all, to find another investor to take over the concession in an atmosphere of such legal uncertainty.<sup>75</sup>

What one sees, in essence, is that a particular measure, disassociated from the pre-existing regulatory commitment established between the regulator and the regulated entity, can have effects that are the opposite of those intended. This is even more serious when one takes into account that the regulatory commitment established in the case of telecommunications in Brazil is not completely rigid and allows for a certain degree of openness and flexibility.

First, there is no protection for concessionaires from changes that result from technological developments or increased competition.<sup>76</sup> Nor is there anything that prohibits the creation of new services that could meet the demand that is targeted by the bill we are criticizing. Also, there is a provision conveying that, relatively soon after the privatization and signing of the concession contracts, there would be revisions of the current conditions through the signing of new contracts, which happened recently in 2006.<sup>77</sup> Finally, there is a complete system of laws aimed to guarantee universal telecommunications service, and those laws could have been used to achieve the intended results of ending subscriptions.<sup>78</sup> In sum, there are alternatives that would not cause instability in telecommunications regulation and would not have potential to cause undesirable effects, more of which will be mentioned in the next section. This argument is not intended to defend the interests of the concessionaires, but rather to suggest

the importance of an adequate discussion about the effects of a change such as the one proposed by the bill.

In this regard, the desirability of better communication between the legislature and the regulatory agency is clear—in this case, ANATEL stated its opposition to ending subscriptions more than once.<sup>79</sup> The importance of basing proposed laws on technical studies that allow for the consideration of plausible causalities is also clear.<sup>80</sup>

The observations in this part of the article have been made without a detailed analysis of the concessionaires' economic-financial situation. In these circumstances, it is undeniable that ending subscriptions would cut off a legitimate revenue expectation under the concession contracts and, consequently, would have a definite negative financial effect on the concessionaires. However, it is not improbable that the concessionaires would suffer a much smaller decrease in their profits than what they have been stating in the media.<sup>81</sup> If the concessionaires were to experience this more modest revenue decrease, they could absorb the revenue loss without compromising their return on investment due to the efficiency gains, technological advances, and changes in consumption levels since the concessions contracts were signed.

However, this speculation would not be sufficient to overcome the criticism of the way in which the bill proposes to end subscriptions, as outlined above. As we noted, there was no analysis of the economic impact in preparing the proposals to change the General Telecommunications Law. On the other hand, the existing regulatory framework has mechanisms that prevent concessionaires from completely appropriating gains from technological advances at the expense of the users. The General Telecommunication, expansion or rationalization of the services, as well as new, alternative revenues [must be] shared with the users, in the terms regulated by the Agency [ANATEL].<sup>\*82</sup>

In other words, the current regulatory commitment itself has mechanisms that allow for requiring the concessionaires to share (with consumers) the gains they achieve as a result of changes to the conditions in which the services are provided. The General Telecommunications Law indicates that this should be done in the context of an administrative process with ANATEL so that the question of whether there are actually gains to be shared can be evaluated.<sup>83</sup>

### IV. ALTERNATIVE PROPOSALS FOR LOW-INCOME CUSTOMERS' ACCESS TO TELEPHONE SERVICES

The bill analyzed in the previous part of the artcile, though inadequate and prone to results that are the opposite of those intended, is motivated by a problem that does actually exist in the telecommunications sector. Although fixed-line telephone service has expanded significantly in recent years since Brazil's state-owned monopoly telephone system (Telebrás) was privatized, lower-income customers remain incapable of acquiring private lines.

It is well known that there are a large number of unused lines that were installed when the concessionaires met their universal services obligations. According to the Ministry of Communications, the number of fixed lines went from 22.1 million in 1998 to 49.2 million in December 2002.<sup>84</sup> However, the number of lines actually in service was only 38.8 million.<sup>85</sup> This significant difference is related to the fact that a substantial part of the population cannot afford the cost of a line; it does not indicate that demand in the country has been fully met, only that a group of individuals cannot afford the service. <sup>86</sup>

Therefore, it is necessary to discuss alternatives that can make fixed-line telephone service accessible to a larger number of people. To focus the question exclusively on a basic subscription fee is not, as we have argued, the best solution. The reduction of the cost of service for low-income customers needs to be part of the context of a coherent universal service

policy that recognizes how the telecommunications sector has evolved in recent years. Moreover, regulatory changes cannot have results that are the opposite of those desired, which would result from concessionaires' increased costs being passed on to consumers. We are not questioning the good intentions behind the proposal to end subscriptions; what we are questioning is the means and the timing to make subscriptions a reality.<sup>87</sup>

The following are some examples of policies that would achieve the aim of facilitating the access to telephone services by low-income users: (i) giving selective tax exemptions to low-income citizens; (ii) designing different service plans with reduced prices; and (iii) giving subsidies with money from FUST.

In regard to the first option—tax exemptions—we note that the Tax on the Circulation of Merchandise and Services (abbreviation in Portuguese—ICMS) is quite high on telecommunications services.<sup>88</sup> In general, the tax rate is 25 percent, but some states charge a higher rate.<sup>89</sup> It is clearly a significant part of the telephone bill. The selective reduction of this tax would tend to reduce low-income consumers' telephone bills. This could be achieved by identifying objective criteria to which the reduced tax rate would be applied, such as applying the reduced rate to residential accounts up to certain amounts. However, putting this into practice would involve a difficult compromise among all of the states in the Brazilian federation, because tax receipts from telecommunications services represent a significant income for the states.<sup>90</sup>

The second option—designing reduced-price alternative service plans that are tailored to the needs and means of low-income consumers—has been suggested by ANATEL.<sup>91</sup> An example would be offering prepaid fixed-line telephone service that would have a low subscription rate and a higher per-minute rate. The prepaid alternative could be successful when one considers the experience in Brazil with this payment scheme for cellular phones, which made them more thoroughly available to the Brazilian population.<sup>92</sup> The user of a "prepaid" cellular phone usually pays a fee to

buy a telephone and subscribe to an operator.<sup>93</sup> He or she then buys minutes in advance, according to his or her needs.<sup>94</sup> Since the user does not need to pay to receive incoming calls, he can use the line only when necessary and can limit his expenditures by making fewer outgoing calls.<sup>95</sup> Due in part to this payment scheme, the number of cellular phones in use in Brazil has risen from 1.4 million in 1995 to an impressive 95.8 million in 2006.<sup>96</sup>

The third suggestion would involve creating subsidy schemes using money from FUST, the fund created to promote universal service in telecommunications services (but which, so far, has not been used). In our opinion, the subsidy could be structured in two ways: (i) direct subsidies to the telephone companies that make the services available to low-income users; or (ii) telephone service vouchers that would be given to consumers to use with the telephone company of their choice.

The use of vouchers presupposes the existence of a competitor in the local market for fixed telephone services. Although this sector has gone through deep liberalization in Brazil, little or no competition has developed in local markets.<sup>97</sup> Furthermore, competitors of the incumbent company tend to focus on high-income users.<sup>98</sup> Notwithstanding these facts, a voucher scheme still makes sense because it might foster competition if the incumbent's competitor finds it profitable to serve the low-income user at the same rates charged by the incumbent. If the user has no competitive alternative, he can still use the voucher to reduce the amount that should be paid to the incumbent.

None of these possibilities would have such direct, foreseeable effects on what we refer to as the regulatory commitment. A tax reduction would be welcomed by the telephone companies, though it would reduce the states' tax receipts.<sup>99</sup> The use of money from FUST would be equally welcomed, in this instance, by society as a whole. The proposal for a new service package involving prepaid fixed-line telephone service would focus on

giving low-income users an alternative rather than on changing the entire revenue structure of the concessionaires.

From these three options, the second—creating a special class of service—would have the most realistic chance of being implemented. The first option of selective tax exemptions would meet strong political opposition for the reasons already stated above. On the other hand, the discussion regarding the use of money from FUST is currently focused primarily on investment in access-to-data networks—essentially, the Internet.<sup>100</sup>

In summary, all three possible options would be viable ways to address access problem to telecommunications services without causing reasonably foreseeable undesirable consequences. And they would have the additional advantage—like VoIP, which has significantly reduced the price of local, long-distance, and international calls—of not running up against the regulatory commitment, regardless of what one may think of that commitment.

### V. CONCLUSION

As we noted throughout this article, extemporaneous changes to regulatory rules, even when they aim to achieve goals that few would object to, can be counterproductive and, in the end, can prejudice those whose interests are allegedly being protected. This is because such changes could lead to one or more of three outcomes: rate increases, reduction in investment and delays in fulfilling obligations, or increases in investors' general risk perception.

Regulation should not, however, be impervious to change. On the contrary, regulation's malleability and adaptability should be valued and pursued, since it has to be in accordance with legitimated equity claims and fast technical changes. Furthermore, these changes might arise with legitimacy from non-technical (non-regulatory) agencies. In this context, legislative initiatives to change the course of regulation are healthy and can

promote oversight and accountability of the regulators, who are essentially technocrats. Such initiatives must not neglect a more complete discussion of the effects of rules that, however well-intentioned, can reasonably be predicted to have counterproductive results.

The example analyzed from the Brazilian telecommunications sector confirms this proposition. The draft statute, aimed at tackling universal service challenges, was proposed in a way perceived by the companies rendering the services as a rupture of the regulatory commitment.<sup>101</sup> Furthermore, the proposal ignored an evaluation and previous assessment of the actual effects and possible outcomes of its implementation. Finally, Brazilian legislators have also ignored other alternatives to promote the same goal—alternatives that could achieve a desired result more efficiently and without jeopardizing the regulatory commitment.<sup>102</sup>

<sup>&</sup>lt;sup>1</sup> This article is a reformulated version of a paper entitled, "Risks of Unstable Regulation in Networked Industries," which was presented at the IV Brazilian Congress of Regulation, held in Manaus, May 15-18, 2005. The authors would like to express their thanks for the criticism and suggestions they received during the discussion of the text during the plenary session of the Law and Democracy Group, a thematic project sponsored by the Brazilian Center for Analysis and Planning (abbreviation in Portuguese –CEBRAP). We would particularly like to thank Jean Paul Cabral Veiga da Rocha (CEBRAP), Caio Mário da Silva Pereira Neto (FGV) for their criticism.

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<sup>&</sup>lt;sup>3</sup> There are legitimacy problems arising from the tension between capitalism and democracy in complex societies. *See* JÜRGEN HABERMAS, LEGITIMATION CRISIS 48-49 (1975). For this author, market economy provides a form of integration that does not satisfy the requirements of reproduction of the social order. Therefore, rises of legitimacy appear when the market harms the forms of institutional organization that support democratic regimes. Although this theoretical discussion—i.e., the problem of legitimacy crisis of regulation—is not the subject of this article, its relevance is unquestionable and it certainly deserves a more thorough analysis. Throughout this article the reference to the legitimacy of a policy or a legal norm is used broadly in a manner similar to the use of the term in more recent works of Habermas. The legitimacy of a policy or a norm is a function of its enactment under conditions that would make it

possible to comply with them out of respect for the law, and not only because the compliance with the norm could be compelled by sanctions. *See id.* 

<sup>4</sup> In general terms, these constraints relate to the deterioration of the financial capacity of these countries to invest in their state-owned companies. At the same time, macroeconomic programs aimed at reducing inflation and imposing fiscal austerity played a significant role in the underlying reasons behind privatization in developing countries. From a political economy standpoint, an environment (labeled neo-liberal) developed worldwide favoring a more limited intervention of the state in the economy during the 1990s. *See generally* ALEXANDRE DITZEL FARACO, REGULAÇÃO E DIREITO CONCORRENCIAL: AS TELECOMUNICAÇÕES (2003) (presenting a Brazilian case study).

The term privatization is used here to describe the sale of state owned companies to private parties. In general, privatization of telecommunications companies in developing countries took place together with broad liberalization, in which foreign operators were provided access to local markets and basic regulatory reforms were introduced allowing the entrance of new services providers in a sector previously organized around a state monopoly. See Ann Buckingham & Mark Williams, Designing Regulatory Frameworks for Developing Countries, in TELECOMMUNICATIONS LAW AND RELIGION 643, 644 (Ian Walden & John Angel eds., 2005). Although privatization and liberalization tend to happen together, the terms do not have the same meaning and are describing different public policies. While privatization refers to the process of transferring assets and activities from the control of the government to private parties, liberalization refers to the creation of more flexible rules regarding access (and rivalry) to certain markets and the constraints for private parties acting in these markets. See IOANNIS N. KESSIDES, REFORMING INFRASTRUCTURE- PRIVATIZATION, REGULATION, AND COMPETITION 2 (2004) (noting that in developing and transition economies a main cause of deteriorating infrastructure performance was underinvestment). Privatization has been a widespread phenomenon during the nineties in several developing economics in Latin America, Africa, and Asia. Latin America was the region that attracted the largest percentage of the private investments directed to the infrastructure sector. Kessides estimates that nearly half of the investments have gone to the region, during the period between 1990 and 2001. Id. at 10. Bortolotti and Siniscalco further notice that three countries (Brazil, Argentina, and Mexico) in particular have a great bearing on the total private investment directed to the acquisition of state-owned enterprises. BERNARDO BORTOLOTTI & DOMENICO SINISCALCO, THE CHALLENGES OF PRIVATIZATION: AN INTERNATIONAL ANALYSIS 30 (2004).

See BORTOLOTTI & SINISCALCO, supra note 5, at 65.

<sup>7</sup> In general, consideration for the acquisition relates to obligations of providing universal and quality service. Part of these compulsory investments will be profitable because of pent-up demand, while part of them will not be because of the low income levels of future customers.

<sup>8</sup> This is the same as saying that privatizations can be a circumstance in which the present price of a state enterprise can be reduced in light of mandatory future investments that will be financed by profitable provision of public services. *See generally* Alexandre Ditzel Faraco et al., *Universalização das telecomunicações no Brasil: uma tarefa inacabada*, 2 REVISTA DE DIREITO PÚBLICO DA ECONOMIA 27 (2003) (Br) (noting that

the price offered in the privatization of the Brazilian telecommunications companies was affected by the compulsory investments the buyer was expected to make).

See generally FARACO, supra note 4 (presenting a general review of privatization in Brazil).

<sup>10</sup> For example, current concessions for fixed telephone services in Brazil have a 20 year term. See, e.g., Contrato de Concessao do Servico Telefonico Fixo, ch. 3, cl. 3.1 available at http://www.anatel.gov.br/Tools/frame.asp?link=/biblioteca/contrato/

concessao/novos/local 2006.pdf. (hereinafter Contrato de Concessao). For a more general discussion on concessions contracts, see KESSIDES, *supra* note 5, at 104-08.

See generally DAVID M. NEWBERY, PRIVATIZATION, RESTRUCTURING, AND REGULATION OF NETWORK UTILITIES (1999) (presenting a more thorough analysis of these characteristcs); see also OZ SHY, THE ECONOMICS OF NETWORK INDUSTRIES

(2001). <sup>12</sup> Even though in many sectors, such as telecommunications, the existence of natural monopolies is being questioned through the attempt to create competitive environments, the existence of potential competition does not exclude the arguments presented here but, on the contrary, tends to confirm them. This is to say, even in a competitive context, the existence of sunk costs will continue to be important. Moreover, the possibility that other actors will enter the market increases the regulated entity's perception of risk. See generally NEWBERY, supra note 11; see also SHY, supra note 11.

See Pablo T. Spiller & Ingo Vogelsang, The Institutional Foundations of Regulatory Commitment in the UK: The Case for Telecommunications, J. Inst. and Theoretical Econ. 607 (1997).

<sup>14</sup> Id. <sup>15</sup> Id.

<sup>16</sup> See KESSIDES, supra note 5, at 101; see also David Parker & Colin Kirkpatrick, Researching Economic Regulation in Developing Countries: Developing a Methodology for Critical Analysis 13-16 (Centre on Regulation and Competition, Working Paper No. 34, 2002).

See KESSIDES, supra note 5, at 101; See generally J. LEWIS GUASCH & PABLO SPILLER, MANAGING THE REGULATORY PROCESS; DESIGN, CONCEPTS, ISSUES, AND THE LATIN AMERICA AND CARIBBEAN STORY (1999).

<sup>18</sup> See KESSIDES, supra note 5, at 102 (providing examples of allegedly opportunistic government behavior regarding private network industries).

We understand that the expression "regulatory commitment" comes with ideological baggage. It is an expression that is currently used by multilateral organizations whose proposals for public-sector reform and the subsequent institutional organization for market regulation are openly liberalizing and, in legal terms, associated with the "rule of law" paradigm, the chief proponent of which is the World Bank. Aware of this, we use the expression "regulatory commitment" without adopting its ideological baggage only because it is a term that is used frequently in the literature that deals with the question we are exploring.

<sup>20</sup> See KESSIDES, supra note 5, at 81 (noting the importance of planning such regulation before privatization); see also FARACO, supra note 4 (describing how the regulatory

commitment in the Brazilian telecommunications sector was defined prior to its privatization).  $21 - G = F_{1}F_{2}$ 

<sup>21</sup> See FARACO, supra note 4.

<sup>22</sup> The telecommunications sector in Brazil is, in a certain way, considered an exception to this tension between short-term gains and the institutional design of a regulatory apparatus that is to be made durable by creating stable rules and a schedule for reviewing and updating those rules. *See* FARACO, *supra* note 4.

<sup>23</sup> See KESSIDES, supra note 5, at 101.

<sup>24</sup> We note that this is not the conservative and, often, "terrorist" argument according to which any regulatory change that affects the disposition to invest in Brazil is heretical, as some orthodox economists alleged. What we are attempting to emphasize is the fact that changes—whether well or poorly implemented, opportune or extemporaneous, technical or populist—affect the balance that was established when the privatization was carried out and the concession agreements were entered into. This is immediately priced in by the market, and after the privatizations, the market must be taken into account.

<sup>25</sup> "Hold up" can also happen in the opposite way, with opportunistic action by the regulator. *See* Parker & Kirkpatrick, *supra* note 16, at 6 ("The precise result of opportunistic behaviour depends crucially, however, on the relative bargaining power of the regulated and the regulator. Alternatively, the regulator and hence the government could be subject to hold up, where post-contract private investors demand a rate or other contract adjustment in their favor, and the regulator has no alternative supplier to turn on.").

<sup>26</sup> Centre on Regulation and Competition, Institute for Development Policy and Management, University of Manchester.

<sup>27</sup> Parker & Kirkpatrick, *supra* note 16, at 12.

<sup>28</sup> Id.

<sup>29</sup> Id.

<sup>30</sup> See generally CLAUS OFFE, CONTRADICTIONS OF THE WELFARE STATE 179-200 (John Keane ed., 1985) (analyzing conflicts between technical agencies and politicians and conflicts between different rationales of public administration in nowadays capitalism).

<sup>31</sup> See, e.g., CASS R. SUNSTEIN, AFTER THE RIGHTS REVOLUTION: RECONCEIVING THE REGULATORY STATE 106 (1990); see also P.N. Grabosky, Counterproductive Regulation, 23 INT'L J. OF SOC. OF LAW 345 (1995).

<sup>32</sup> SUNSTEIN, *supra* note 31, at 77-79.

<sup>33</sup> Id.

<sup>34</sup> Grabosky, *supra* note 31, at 345. Other examples include messages from regulators regarding the risks involved in a particular activity that can end up serving as advertising that promotes those risks. Information from regulators about animal species facing extinction together with information about the prices that these species bring on the black market, as another example, can act as an incentive to engage in the activity that the regulator is seeking to stop.

<sup>35</sup> See SUNSTEIN, supra note 31, at 82-86; see also KESSIDES, supra note 5, at 20-21; NEWBERY, supra note 11, at 306-07.

<sup>36</sup> See SUNSTEIN, supra note 31, at 81; see also KESSIDES, supra note 5, at 20-21.

See SUNSTEIN, supra note 31, at 82-83 (providing examples that would fit these hypothesis). See also ROBERT BALDWIN & MARTIN CAVE, UNDERSTANDING REGULATION: THEORY, STRATEGY, AND PRACTICE 102-03 (1999) (referring to the term "creative compliance").

<sup>38</sup> See, e.g., SUNSTEIN, supra note 31, at 100.

<sup>39</sup> See Projecto de LEI No. 5.476, de 2001 (proposing a modification of Lei No. 9.472, de 16 de julho de 1997, [Lei Geral das Telecomunicações Brasileiras ] (hereinafter General Telecommunications Law)).

Approximately US \$15.00 considering the average exchange rate during February 2007. See Federal Reserve Statistical Release, Spot Exchange Rate-Brazil, http://www. federalreserve.gov/RELEASES/H10/hist/dat00 bz.txt (last visited March 27, 2007).

See Câmara dos Deputados, Consulta Tramitação das Proposições, http://www2. camara.gov.br/proposicoes/loadFrame.html?link=http://www.camara.gov.br/internet/sileg /prop lista.asp?fMode=1&btnPesquisar=OK&Ano=2001&Numero=5476&sigla=PL

(providing the draft statute, other similar proposals, and the report issued by Representative Luiz Bittencourt) (last visited Apr. 7, 2006).

See Comissão de Defesa do Consumidor, Meio Ambinete e Minorias, available at http://www.camara.gov.br/sileg/integras/208219.pdf (presenting justification for draft statute 5.476).

<sup>43</sup> Providers of telecommunications services in Brazil all need to be licensed by the federal government. There are two types of licenses foreseen in the General Telecommunications Law currently granted: concessions and authorizations. A concession is granted under an administrative contract signed with the federal government in cases in which the provider must comply with universal services obligations (currently only part of the providers of fixed-line telephone services operate under a concession contract). For all other cases an authorization is granted, allowing the provider to operate under a more flexible regulatory regime.

See Contrato de Concessao, supra note 10, at ch. 13.

<sup>45</sup> See Contrato de Concessao, supra note 10, at ch. 13.

<sup>46</sup> The current concession contract models for local, domestic long-distance, and international long-distance fixed-line telephone service were approved in ANATEL Resolution No. 26/98. It is worth noting that the concession contract models that have been used from 2006 onward maintain equilibrium rules similar to those in the current contracts. See ANATEL Resolution No. 341/03 (approving the concession contract models).

See Contrato de Concessao, supra note 10, at anexo 3.

<sup>48</sup> The fixed-line telephone service concession contracts use price-caps in order to set the rate. Maximum values are established for the components of the rate and the concessionaire is authorized to apply lower values. At the same time, a rate revision mechanism with a predetermined factor is foreseen. The revision is done based on an inflation index from which is deducted the predetermined factor.

See Contrato de Concessao, supra note 10, at ch. 13.

<sup>50</sup> See Hely Lopes Meirelles, Licitação e contrato administrativo 205 (Revista dos Tribunais, 3rd ed., 1977).  $^{51}$ 

Id.

<sup>52</sup> As Meirelles explained: "From the government's perspective, an administrative contract is to meet public necessities, but from the perspective of the contracting party, the goal is a profit through remuneration provided for in the economic and financial clauses of the contract. This profit is to be assured in the initial terms of the agreements, during the performance of the contract, in full, even if the government finds itself compelled to change the method and form of contractual performance to better meet the requirements of the public service." MEIRELLES, *supra* note 50, at 205.

<sup>53</sup> Except in a few market segments, the legal abandonment of monopoly did not result in structural modifications in the telecommunications sector, especially in what constitutes local services. The mere elimination of legal barriers to entry, in an activity that presents considerable sunk costs, does not guarantee market contestability. As is demonstrated by the theory of contestable markets, the existence of sunk costs diminishes proportionally the probability of new competitors entering the market. *See* WILLIAM J. BAUMOL & J. GREGORY SIDAK, TOWARD COMPETITION IN LOCAL TELEPHONY 42-45 (1994). One alternative through which regulators try to solve this problem is obliging the owner of an infrastructure representative of sunk costs to accept the access of other competitors to that infrastructure (like unbundling obligations in the telecommunications sector). Hypothetically, these regulatory measures would reduce the amount of investments necessary to enter a certain market, raising its contestability. In the Brazilian scenario, though, the regulation of this matter is still insufficient. *See* Alexandre Ditzel Faraco, *Concorrência e universalização nas telecomunicações: evoluções recentes no direito brasileiro*, 8 REVISTA DE DIREITO PÚBLICO DA ECONOMIA 9-37 (2004).

<sup>54</sup> See infra note 55.

<sup>55</sup> Contrato de Concessao, *supra* note 10, at ch. 13, cl. 13.1:

A basic presumption of this Contract is the preservation, in a regimen of broad competition, of the just equivalence between the provision of the services and the remuneration, it being prohibited for the parties to become unjustly enriched at the expense of the other party or of the users of the service, in the terms stated in this Chapter.

(1) The concessionaire will not be obligated to absorb losses as a result of this Contract, unless these result from one of the following factors:

I - From its negligence, ineptitude, or omission in providing the service;

II - From the normal risks of the business activity;

III - From the inefficient management of its business, including that characterized by the payment of operational and administrative costs that are incompatible with the market parameters, or

IV - From its incapacity to take advantage of opportunities that exist in the market, including in regard to the expansion, broadening, and increasing of the provision of the service that is the object of the concession.

(2) The unjust enrichment of the Concessionaire is prohibited when:

I- it results from the appropriation of economic gains that do not directly result from its business efficiency, and especially when it results from the promulgation of the new rules regarding the service....

(3) The Concessionaire will be entitled to the recomposition of its initial situation of charges and remunerations when circumstances of force majeure or calamities affect in a significant way the provision of the service, always observing, as a parameter, the consequences of these on the situations of the service providers in the private regimen.

(4) In evaluating the appropriateness of the recomposition described in the preceding paragraph, the existence of coverage for the event that motivates the change of the initial economic situation by the Insurance Plan provided for in section 24.1 will be considered, among other factors.

<sup>56</sup> Id.

57 Id.

<sup>58</sup> *Id.*, at ch. 4, cl. 4.3.

<sup>59</sup> ANATEL is the federal administrative agency in charge of regulating the Brazilian telecommunications sector. *See generally*, ANATEL Home Page, http://www.anatel. gov.br (last visited Apr. 7, 2006).

 $^{60}$  See generally Faraco et al., supra note 8 (analyzing the growth of mobile phone use in Brazil and how it affects the fixed-line telephone market).

<sup>61</sup> See generally JONATHAN E. NUECHTERLEIN & PHILIP J. WEISER, DIGITAL CROSSROADS: AMERICAN TELECOMMUNICATIONS POLICY IN THE INTERNET AGE 202 (2005) (providing a general description of the VoIP technology and its impact on traditional telephone services).

<sup>62</sup> Article 6 of the General Telecommunications Law states, "Telecommunications services will be organized on the basis of the principal of free, ample, and just competition among all the operators." Lei No. 9.472, art. 6, de 16 de julho de 1997 [Lei Geral das Telecomunicações Brasileiras] (General Telecommunications Law) (Braz.) In dealing specifically with concessions, it established that these "will not be of an exclusive nature" and that the "competitive environment" must be considered in the definition of the areas in which the service is to be provided, the number of service providers, the contract length, and the timeframe for the admission of new service providers. General Telecommunications Law, art. 84(1). Also in this context, is permitted to provide the same modality of service at the same time in the public and private regimen. General Telecommunications Law, art. 65. The law thus allows for the existence of competition among service providers acting in the public regimen and others acting in the private regimen.

<sup>63</sup> See FARACO, *supra* note 4, for a general review of these rules under the General Telecommunications Law.

<sup>64</sup> *See, e.g.,* General Telecommunications Law, art. 65, 84; *see also* General Telecommunications Law, art. 104 (foreseeing the possibility of unregulated tariffs when the concessionaire faces the competition of other entrants).

<sup>55</sup> See Contrato de Concessao, supra note 10, at ch. 13, cl. 13.3.

<sup>66</sup> Such as if the government unilaterally imposes a reduction of the tariff or demands additional investments.

Contrato de Concessao, supra note 10, at ch. 13, cl. 13.3:

Independently of the terms of 13.1, it will be appropriate to revise the rates making up the Local Service Basic Plan in favor of the Concessionaire or of the users, in accordance with Article 108 of Law 9.472 of 1997, when one of the following specific situations arises:

I - A unilateral modification to this Contract imposed by ANATEL that causes a significant variation in costs or revenues, either higher or lower, in such a way that a rate increase or decrease is necessary to avoid unjust enrichment by either of the parties;

II - A change in the tax system after this Contract is signed that implies an increase or reduction in the Concessionaire's potential profitability;

III - Supervening occurrences that arise from acts of state or of the government that can be proved to result in a change to the Concessionaire's costs;

IV - A legislative change of a specific nature that directly affects the Concessionaire's revenue in such a way as to affect the continuity or quality of the service provided; or

V - A legislative change that benefits the Concessionaire, including one that gives or takes away an exemption, reduction, discount or any other tax or rate privilege, in accordance with what is stated in Article 108(3) of Law 9.472 of 1997.

1. Losses or diminished profits for the Concessionaire that result from its uninhibited provision of the service in competitive conditions or from inefficient management of its business will not lead to a rate revision.

2. The review described in item II of this section will not be applicable when the change in the tax system results in the creation, suppression, elevation or reduction of taxes incident to the Concessionaire's income or profit, such as the income tax, that does not result in an administrative or operational burden.

3. The rate revision described in this section will not be applicable when the triggering events for the revision are already covered by the insurance plan described in section 24.1.

4. The Concessionaire's contributions to the Fund for the Universalization of Telecommunications Services and to the Fund for the Technological Development of Telecommunications will not to result in rate revisions.

<sup>68</sup> See Faraco et al., *supra* note 8 (describing the opening of the Brazilian telecommunications market).

<sup>69</sup> FUST is a fund created by Lei 9.998/00 to subsidize universal services polices in Brazil. Lei no. 9.998/00, de 17 de agosto de 2000. Its main source of revenue is a contribution levied on the revenue of all telecommunications companies. *See generally* MINISTÉRIO DAS COMUNICAÇÕES, DIAGNÓSTICO DE NECESSIDADES DE UNIVERSALIZAÇÃO DE SERVIÇOS DE TELECOMUNIÇÕACES NO BRASIL, http://www.mc.gov.br/sites/600/695/ 00001915.pdf (providing general information on FUST).

<sup>70</sup> These scenarios are hypothetical. It is not the result of a simulation based on a detailed study of Brazilian fixed-line telephone service consumer behavior. Although it is possible to argue that the inverse is true and that consumers might not be affected by

the change in many cases, such an evaluation was not done in the context of the bill we are commenting on. What we are trying to demonstrate is simply that a proposal without a technical basis and analysis of economic impact might result in an imbalance in the relationship between the government and the concessionaire without achieving its intended results.

<sup>71</sup> See Comissão de Defesa do Consumidor, Meio Ambinete e Minorias, *supra* note 42.

<sup>72</sup> See the Report by Representative Luiz Bittencourt, *available at* http://www2.camara.gov.br/proposicoes/loadFrame.html?link=http://www.camara.gov.br/internet/sileg/prop\_l ista.asp?fMode=1&btnPesquisar=OK&Ano=2001&Numero=5476&sigla=PL.

<sup>73</sup> See Projecto de lei, No. 5.476, de 2001 (Brazil).

<sup>74</sup> These companies have strongly opposed the draft statutes, a fact that was reported in the Brazilian press and can be confirmed by consulting the several technical papers made available on the website of the association that represents the concessionaires. *See* Associação Brasileira de Concessionárias de Serviço Telefônico Fixo Comutado (Abrafix), Press Room, http://www.abrafix.org.br/v2/sala\_imprensa\_base.php?i= 4&area=3.2 (last visited March 26, 2007).

<sup>75</sup> It is possible to imagine extreme situations in which this would not happen, such as if the concession were nationalized without any indemnification and then granted to a new concessionaire who would only be obligated to run and maintain the existing network (who, if not required to make any investment, could be interested in taking over the concession). In that case, the negative effect would show up over a longer time, when it became necessary to find sources to finance an expansion of the network.

<sup>6</sup> See Contrato de Concessao, supra note 10, at ch. 13.

<sup>77</sup> See General Telecommunications Law, art. 207(1).

<sup>78</sup> See Lei No. 9.998, de 17 de agosto de 2000 (creating the Fundo de Universalização dos Serviços de Telecomunicação (FUST) in Brazil).
<sup>79</sup> The position of ANATEL

<sup>79</sup> The position of ANATEL was reported in the Brazilian press. *See, e.g., Anatel critica fim da assinatura de telephone proposta pela Camara*, O GLOBO (Braz.), May 6, 2004. <sup>80</sup> The brief instification and the brief instification of t

<sup>80</sup> The brief justification attached to Bill 5.476/01 does not make reference to any technical study that could support its conclusion that ending the subscription fee would foster access to the service.

<sup>81</sup> See Press Release, Abrafix, A Tarifa de Assinatura Mensal na Telefonia Fixa no Brasil, *available at* http://www.abrafix.org.br/admin/imagens/upload/sala\_imprensa\_ arquivos/discurso6.pdf (regarding the proposal to end the subscription fee) (hereinafter Subscription Fee Press Release).

<sup>82</sup> General Telecommunications Law, art. 108(2).

<sup>83</sup> We do not intend to state that the legislature cannot act in this regard through changes in the law that allow for achieving the goal of Article 108(2) of the General Telecommunications Law. This could even be a way to deal with a possible capture of the regulator by the regulated entity, causing the agency to fail to apply the law in question. What we emphasize, however, is the opportunistic nature of the bill which does not concern itself with understanding the regulatory framework, investigate possible changes in the conditions in which the services are provided, or identify a failure by ANATEL. The bill is, therefore, an act that increases uncertainty about the rules that

apply to the telecommunications sector, leading to an increase in the regulated entities' perception of risk.

<sup>84</sup> See Ministério das Comunicações, Acessos fixos comutados instalados, http://www.mc.gov.br/005/00502001.asp?ttCD\_CHAVE=7774 (last visited March 27, 2007).

<sup>85</sup> Id.

<sup>86</sup> See generally Faraco et al., supra note 8.

<sup>87</sup> It appears that enough time has now passed to recognize that Brazil's policy for universalizing telecommunications access has not followed a steady and coherent strategy. As governments and regulators come and go, regulation in this sector has lost its continuity and objectivity, with its policies following the plans of whatever group is in control at the moment. It is unnecessary to point out the impediment this presents to achieving the desired goals and consolidating the regulation. *See* Faraco, *supra* note 53.

<sup>88</sup> The ICMS is similar to a value added tax (VAT) imposed on goods and certain services. Each state of the Brazilian federation has authority to create and levy its ICMS, which makes it difficult to coordinate actions regarding this tax on a national level, since this would depend on the agreement of all states.

<sup>89</sup> See Abrafix, http://www.abrafix.org.br/admin/imagens/upload/sala\_imprensa\_ arquivos/tabela\_icms.pdf (providing data) (last visited March 26, 2007).

<sup>90</sup> Each one of the states has a considerable degree of autonomy to legislate about ICMS and determine its rate. Therefore, to implement a national reduction of such tax on telephone services would require the agreement of all states.

<sup>91</sup> *See* Consulta Pública No. 457, de 6 de juhnho de 2003 (regarding Special Class Individual Access (abbreviation in Portuguese AICE) to fixed-line telephone service).

<sup>92</sup> See generally Faraco et al., supra note 8 (discussing more specific data concerning the use of cellular phones in Brazil).

<sup>93</sup> *Id.* 

<sup>94</sup> Id.

<sup>95</sup> See Faraco, supra note 53.

<sup>96</sup> From these 95.8 million lines in use, approximately 77.3 million were sold under the "prepaid" scheme. *See* ANATEL, Dados Relevantes do SMP, Septembro 2006, at 6, *available at* http://www.anatel.gov.br/Tools/frame.asp?link=/comunicacao\_movel/smc/ dados\_relevantes\_smc\_smp.pdf.

<sup>97</sup> See generally Faraco, supra note 53.

<sup>98</sup> Id.

<sup>99</sup> See Press Release, supra note 81.

<sup>100</sup> See Faraco, supra note 53. Following Consulta Pública No. 457, supra note 91, Anatel actually implemented an alternative service as of the end of 2005. It offers a discount of 40% on the monthly subscription fee (but does not abolishes it) and the user may subscribe to it under a prepaid modality. See Press Release, Anatel, Anatel publica regulamento do Acesso Individual Classe Especial (Aice), (Dec. 20, 2005), http://www.anatel.gov.br/Tools/frame.asp?link=/biblioteca/releases/2005/release\_20\_12\_ 2005rl.pdf. Since making calls from it is more expensive, and the subscription fee has been maintained in part and does not entitle the user to any calls, the results of

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introducing this alternative service are highly uncertain and probably will not make a considerable difference. <sup>101</sup> See Press Release, *supra* note 81. <sup>102</sup> See Comissão de Defesa do Consumidor, *supra* note 42.