



Selected academics and practitioners have been invited to Florence on June 12th 2015 to discuss the latest developments in the regulation of different network industries, namely transport, energy, telecoms and water distribution. The fourth edition of the Conference on the Regulation of Infrastructures had a special focus on emerging countries and several authors coming from these regions presented their research at the Conference.

A key element of the Conference is the exchange between young researchers and experienced professors specialised in different fields. Building on the experience gained from the past editions, the ambition of this Conference is to stimulate interdisciplinary as well as cross-sectorial discussions on the regulatory challenges in the network industries. As the four sectors are not in the same stage of transformation and different countries are not in the same development phase, a big variety of different questions and different policy options have been discussed. However, the Conference also promoted cross-sectorial discussions and exchanges on the general issues pertaining to all sectors such as the complex interplay between sector specific and competition regulation.

The Conference allowed researchers to get high quality feedback from fellow colleagues and to learn from the experience of other network industries. 14 papers have been presented in seven round table sessions each dedicated to one of the discussed industries. Moreover, all the research areas of the Florence School of Regulation (Communications and Media, Energy, Transport, and Water regulation) were present with dedicated sessions in which the Area Directors moderated and discussed the papers. The Conference ended with a final joint session of all sectors, i.e., a joint round table featuring Prof Matthias Finger (FSR-Transport), Prof Jean-Michel Glachant (FSR-Energy), Prof Xavier Labandeira (FSR-Climate), Prof Pier Luigi Parcu (FSR-Communications and Media) and Prof Stéphane Saussier (FSR-Water).

In light of the success of this year's Conference we look forward to continuing this important cross-sectorial approach in the upcoming editions of the Conference on the Regulation of Infrastructures.

Nadia Bert, David Kupfer, Organizers

Regulating Communications and Media

In the telecoms sessions, this year we had 4 interesting papers focusing on different topics. One paper proposed a comparative analysis among different EU Member States and also with the US on how postal services are trying to react to the digital innovation. The second paper dealt with the fixed mobile substitution in the telecommunications sector, proposing an accurate analysis of the recent Turkish experience.

The other two papers concerned more directly the development of network industries in emerging countries. One concentrated on the role of non-State actors in the regulatory reforms outside the EU, mainly looking at international and supranational organisations. The paper developed through two case studies: the reform concerning wireless broadband in the Republic of Myanmar, and the reform concerning the media sector in the Western Balkans. Finally, we had a paper dealing with Middle East North African (MENA) Countries, enquiring whether regulatory reform sequences matter for telecom sectors performances.

Even though all the 4 papers were really interesting and well developed, we proposed the last one as the best paper of our Communications & Media Area. The study analyzed the effect of regulatory reforms in 17 Mena Countries along a period of 16 years (1995-2010). The topic is truly interesting and we encourage further developments of the analysis made.

Pier Luigi Parcu, Director Florence School of Regulation Communications and Media Area

Regulating Energy Networks

With the launch of the Energy Union last year, regulation in the energy sector is facing several new (and old) questions: which market segments should be regulated? At which level? And more importantly, following which criteria? The 4 papers presented this year for energy tried to address and find answers to some of these key questions. One paper focused on the “micro” level of electricity transmission and depicted the application of a disaggregated nodal pricing system, with the aim to improve allocation of scarce transmission capacities. The second paper brought a picture of the US about the recent regulatory initiatives concerning reduction of CO2 emissions and the big resistance they encounter, particularly in some US states. The study focuses, in particular, on the CPP (Clean Power Plant) rules, supported by the current government and requiring individual states to develop plans for reducing greenhouse gases.

The third paper discusses and describes the revolutionary idea of distributed energy systems (DES), which obliges us to re-design and re-think the current market design based on a new approach to designing distribution network use-of-system charges (as part of a comprehensive system of prices and regulated charges for all electricity services).

The fourth paper, also looking at the distribution level, postulates the need for innovative regulatory pilot projects addressing, among others, three discrete regulatory factors: DSO’s concentration, type of regulatory model and smart grids’ incentives.

The paper we proposed as best paper for the FSR energy area was the third one, because in our view it contributed with innovative thinking albeit being supported by practical arguments and reasoning.

Jean-Michel Glachant, Director Florence School of Regulation Energy Area

Regulating Transport

In the transport sessions four papers have been presented. The authors dealt with great variety of topics like multimodal terminal concessions in Sweden, rail regulation and privatization in Brazil urban public transport in France, and railway regulation in the EU.

Jason Monios (Transport Research Institute, Edinburgh Napier University, UK) presented his innovative approach to the study of intermodal terminal concession, which is based on the World Bank model for port concessions and is applied to Sweden. Despite the initial stage of his research, he demonstrated the potential of the approach. The possibility to further develop and apply this approach to other case studies leads to identifying emerging regulatory issues. In fact, intermodal terminals will be gaining attention in the years to come because of the growth potential of global multimodal transport. Edson Gonçalves and Patrícia Sampaio (Fundação Getulio Vargas, Rio De Janeiro, Brazil) studied the railway privatization process currently undertaken in Brazil. The Brazilian situation is very peculiar as every region has developed its railway system independently. Also, at present technical differences basically prevent competition and open access. Furthermore, the weak position of the national regulatory agency as well as the unique role of Valec (state owned company) make this case very interesting and highly debated. Joanna Piechucka (PhD candidate - Paris School of Economics - Université Paris 1) presented her study on the impact of different regulatory contracts upon the operating costs of the urban public transport industry in France throughout the years 1995-2010. Following a regulatory economics approach, she focused on the need to define regulatory incentives to improve the overall efficiency of the urban public transport system. Valerio Benedetto (PhD candidate - ITS Leeds) is currently analysing the results of a questionnaire sent to railway regulators, infrastructure managers and operators across the EU.

The transport sector worldwide is currently undergoing significant changes, characterized namely by growing intermodality, which in turn leads to a growing importance of intermodal hubs. Both are a great challenge for traditional, sector-specific approaches to regulation. And this is a topic which we will certainly pursue in this Conference, as well as in the Florence School of Regulation's Transport Area.

Matthias Finger, Director Florence School of Regulation Transport Area

Scientific Committee

- Matthias Finger (EPFL and EUI, Director of the Transport Area of FSR)
- Jean-Michel Glachant (Director of the Energy Area of FSR)
- Leigh Hancher (Director of the EU Energy Law & Policy Area)
- Xavier Labandeira (Director of the Climate Policy Research Unit of FSR)
- Pier Luigi Parcu (Director of the Communications and Media Area of FSR)
- Ignacio Pérez-Arriaga (MIT, Comillas and EUI, Director of the Energy Training of FSR)
- Stéphane Saussier (IAE de Paris and FSR, Director of the Water Area of FSR)

COMMUNICATIONS AND MEDIA

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- Riham Ahmed Ezzat*, Carlo Cambini, Carine Staropoli: Do regulatory reform dynamics matter for telecom sector performance? Evidence from MENA countries
- Fuat Oğuz, Erman Benli*: Fixed-Mobile Substitution in Telecommunications: A Comparative Analysis of the Recent Turkish Experience
- Maria Luisa Stasi: The role of non-State actors in the regulatory reform outside the EU

ENERGY

- Günter Knieps*: The evolution of smart grids and the increasing need for disaggregated nodal pricing
- Joseph P. Tomain*: The Democratization of Energy
- Jesse Jenkins, Ashwini Bharatkumar*, Scott Burger, Jose Ignacio Pérez-Arriaga: Redesigning the Regulation of Electricity Distribution Under High Penetration of Distributed Energy Resources
- Alexis Meletiou*, Carlo Cambini, Ettore Bompard, Marcelo Masera: Regulatory reforms for incentivizing the investments in innovative Smart Grid projects in Europe: Best practices from EU member state cases

TRANSPORT

- Jason Monios*, Rickard Bergqvist: Developing a Framework for Standardising and Harmonising Intermodal Terminal Concession Contracts
- Edson Gonçalves*, Patrícia Sampaio, Joisa Dutra, Mariam Daychoum: Regulatory reform in the Brazilian railway sector and its potential effects
- Valerio Benedetto*, Chris Nash, Andrew Smith: Rail regulation in Europe: an industry-based survey
- Joanna Piechucka*: Regulatory contracts and cost efficiency – the French urban public transport case

WATER

- Alexandre Mayol*, Simon Porcher: An empirical study of French water distribution: performance and efficiency measures
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Postal strategies in a digital age

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Abstract

This paper will summarize a completed, but not yet published study on an EU-wide research project describing and analyzing the development of broadband markets in Europe with the aim to facilitate the realization of the broadband targets set for 2020 in the Digital Agenda for Europe.

Electronic communications impact all of postal operators' businesses. While letter mail volumes are decreasing due to electronic substitutes, parcels are thriving. Postal operators react in different ways to these challenges and opportunities. Some try to compensate the loss in their mail business by converging their services to telecommunications, e.g. by offering hybrid or electronic mail. Some focus on parcels and electronic commerce solutions. Some try to reduce their universal service obligations and try to cut costs. Some leverage their networks, e.g. post offices into banks or retail centers, or mail carriers into community service providers. And many apply a mix of those strategies.

This paper explores various approaches by means of selected case studies and an overview of performance indicators. The indicators reveal particularly successful strategies, namely those that leverage infrastructure, reputation and competencies. Based on the results, generic strategies are derived. Special attention is given to the legal and regulatory environment which critically affects the post's ability to adopt a successful business strategy.

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Do regulatory reform dynamics matter for telecom sector performance? Evidence from MENA countries

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Keywords

Regulation, Privatization, Competition, Telecom industry, MENA region, Reforms dynamics

Abstract

Since the late eighties, governments in developing and developed countries have designed telecommunication policies aiming at introducing competition. This implies usually new regulation framework and privatization of the State Owned Enterprises (SOEs). This paper empirically assesses the effect of the sequence of different infrastructure reforms (regulation, privatization and competition) in the telecommunications sector on the sector performance, by using a sample of 17 Middle East North African “MENA” countries for the period 1995-2010. Countries are free to choose how to proceed notably whether to establish an independent regulatory authority (IRA) before or after privatizing the State Owned Enterprises (SOEs), as well as they can create the IRA before introducing competition rather than after. In the case of MENA countries, which are significantly heterogeneous in terms of economic development and financial constraint notably, we assume that the choices of reforms sequences are affected by institutional, political and economic variables such as the democracy level, the legal origins, the natural resources rents per country and the independence year from colonization. We correct for the endogeneity of telecom reforms sequences and we use IV-2SLS estimation to analyze the outcome of reforms sequences in terms of telecommunication sectors performance (access, prices, productivity and quality). We find that the sequence of reforms matters: an IRA established before privatizing the incumbent operator improves the sector access but with an increase in the fixed prices. However, the effect of the IRA before introducing competition doesn't increase efficiency. This result can be explained by the regulatory

capture and the high level of incumbent protection in MENA, which impose high constraints on new entrants.

JEL Classification

L11; L14; L33; L43; L51; L96; O38; O50

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Fixed-Mobile Substitution in Telecommunications: A Comparative Analysis of the Recent Turkish Experience

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Keywords

FMS, market definition, deregulation, competition, Turkey

Abstract

Fixed-mobile substitution (FMS) has been one of the most important issues in telecommunications markets in recent years. It has had significant impacts on the regulatory governance in the EU and Turkey. While technology and economic structure of telecommunications markets have changed substantially with FMS, regulators tend to take a conservative attitude toward FMS. This attitude is not neutral among market participants. The divergence between economic structure and legal environment has a redistributive effect on telecommunications markets. As fixed and mobile markets have become close substitutes in terms of consumer preferences and supply side considerations, the distinction between mobile and fixed networks has lost its importance in terms of market demand. Yet, the regulatory regimes have remained suspicious of the consequences of FMS. As a result, the asymmetry between regulatory framework and market realities has opened doors to wealth transfers and rent-seeking activities in these markets and regulatory process has turned into a strategic game between operators and regulatory agencies.

JEL Classification

K21, K23, L50, L96

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The Role of Non-State actors in the Regulatory Reforms Outside the EU

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Keywords

Non-State actors, regulatory reforms, electronic communications, media

Abstract

Introduction

Traditionally, regulation has been an exclusive domain of the State. However, there is a growing recognition that this is not the case anymore. The move towards the “decentralisation” of State regulatory powers has been described in various ways: outsourcing or contracting out, public-private partnerships, privatisation of public management functions. The major critiques moved to the phenomenon concerned the fact that privatisations are neither participatory nor accountable.

The appearance of non-State actors in regulation can have different causes, depending on the context as well as on the specific sector. Generally speaking, in developed countries, since the '90s we have generally witnessed a move to the State reliance on new forms of regulation, increasingly involving self-regulating organisation and regimes of enforced self-regulation. On the contrary, in developing countries, the appearance of non- State actors often derives from the fact that the capacity of the State itself and most of its institutions is eroded, undermined or simply still fragile.

While there are many types of non-State actors, I will concentrate on international and supranational organisations. Moreover, I will focus on the experience of countries outside the European Union. Finally, I will narrow my attention to the regulatory reforms concerning the electronic communications and media sector.

Research question

In this paper I investigate the role of international and supranational organisations in the decision-making process leading to the establishment of new regulatory regimes in the electronic communications and media sector in countries outside the European Union.

Methodology

I will focus on two case-studies: (i) the reform concerning wireless broadband in the Republic of Myanmar, and (ii) the reform concerning the media sector in the Western Balkans. For each of them, I will try to reconstruct the interplay among international/supranational organizations and governments in the decision making process and analyze the out coming regulatory frameworks. I will then compare both elements: on the one hand, the dynamics occurred in the shaping of domestic law of each respective country, and, on the other hand, the characteristics of the respective regulatory frameworks in which such processes resulted. While doing this, I will try to trace likely causal links between the role played by international/supranational actors and a specific rule put in place in one or the other national experience.

While analyzing the decision-making process, I will map the actors involved and try to measure their respective influence recurring to parameters such as, among others, (i) the use of public or private funding for the development of the infrastructure; (ii) the nature (private or public) of the implementing entity; (iii) the deference, spontaneous or required, to international soft law instruments like resolutions, recommendations or declarations issued by regional and/or international organizations.

Expected results

My research is only preliminary. I compare two case-studies and propose a different reading of the role of on State-actors in shaping the domestic regulatory framework concerning the electronic communications and media sector in countries outside the EU.

More in particular, I expect to show that, starting from a similar political, economic and social context, the regulatory reform in the sector under consideration can lead to quite different outcomes depending on the influence and weight exercised by non-State actors such as regional or international organizations. Due to the specificity of the sector at stake, the differences I expect to point out are extremely significant in terms of policy objectives concerning respectively, broadband diffusion and affordability of access on the one side, and media freedom and media pluralism, on the other side.

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The evolution of smart grids and the increasing need for disaggregated nodal pricing

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Keywords

Smart grids, microgrids, disaggregated nodal pricing, distributed generation, European energy policy

Abstract

Changes in the architecture of smart electricity systems encompass the growing importance of the interaction of distribution networks with microgrids. Make or buy decisions to build and operate a smart grid platform as well as decisions to extract and inject electricity from an electricity network should take into account the node-specific opportunity costs imposed on electricity networks by injection or extraction. The implementation of disaggregated nodal pricing leads to an optimal allocation of scarce transmission capacities. This holds not only within networks, but also regarding the incentive compatible integration of smart grids into electricity networks.

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The Democratization of Energy

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Abstract

The US electric industry has been trying to resolve a structural problem for over three decades. Prior to 1978, it became apparent that traditionally structured electric utilities had overbuilt and that electricity prices were rising. In 1978, as a result of the passage of the Public Utilities Regulatory Policies Act, it became apparent that cheaper electricity was available but needed to find its way onto the market.

Today, the industry must confront two significant challenges. First, the transmission segment must be improved. Second, the generation segment must be cleaned in response to climate change. In June 2014, the Obama administration proposed rules under the rubric of the Clean Power Plant (CPP), which requires individual states to develop plans for reducing of greenhouse gases, particularly carbon dioxide, later this year unless extensions are granted. Because each state has a different resource portfolio to generate electricity, flexibility is necessary under the guise of energy federalism (i.e. federal-state policy interactions).

The electric industry has not embraced the CPP and has argued that such regulatory requirements are injurious to it. The industry puts forward two basic arguments. First, it argues that as a result of the availability of non-utility electricity, particularly from distributed generation, that it will soon be in the throes of a “death spiral.” Second, the imposition of further regulations, particularly those addressing carbon emissions, threatens the reliability of the entire electric system. Neither the death spiral nor the reliability argument is sound. Instead, the CPP presents an opportunity for business and regulatory innovations.

This paper will argue, first, that the CPP is sound and constitutes an important new direction for US energy/environmental policy. And, second, from a political science perspective, there is a strong argument to be made in favor of supporting a clean energy transition because it enhances democracy. The central democratic principle is to promote greater participation and voice in institutions both political and economic. In more democratic ways, the clean energy paradigm affects the production

and delivery of energy; its consumption and control; its regulation and enforcement; and, its governance and legal institutions.

In brief, the paper will argue that traditionally structured utilities must change their business models and that regulatory requirements must change with them to promote the transition to a clean energy economy.

Redesigning the Regulation of Electricity Distribution Under High Penetration of Distributed Energy Resources

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Abstract

Amidst efforts to decarbonize power systems or expand access to electricity, many developed and developing power sectors have seen the emergence of distributed energy systems (DES). DESs are combinations of distributed energy resources, advanced power electronics, and/or information and communication technologies. DESs can take the form of microgrids, nanogrids, dispersed aggregations of electricity loads and DERs, or a range of other configurations. Integration of these distributed technologies calls for proactive development of a new regulatory framework in both developed and developing power sectors before inadequate regulation becomes a source of inefficiency. In order to help address the regulatory challenges posed by the growing presence of distributed technologies and create a level playing field on which electricity services can be provided with the most efficient combination of decentralized and centralized resources, this paper proposes: 1) a novel process for establishing the allowed revenues of an electricity distribution utility; 2) a new approach to designing distribution network use-of-system charges (as part of a comprehensive system of prices and regulated charges for all electricity services); and 3) a framework for characterizing the circumstances under which different energy technologies can successfully compete to provide different electricity services.

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Regulatory reforms for incentivizing the investments in innovative Smart Grid pilot projects in Europe: A regulatory factors study

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Keywords

Energy Utilities; Investment; Incentive regulation

Abstract

The transition towards a smarter European electricity system requires a whole new set of heavy investments, including the implementation of R&D and demonstration projects. Distribution system operators (DSOs) are expected to lay down the foundations of the smart electricity grid (SG), thus bearing the lion's share of the initial investments on system innovation. In view of this paradigm shift, the need for an updated, innovation-friendly regulation framework that will incentivize DSOs' investment activities is of utmost importance. Based on a review of the European regulatory status quo, the study focuses on the examination of three discrete regulatory factors: the DSO concentration, the type of regulation model and the specialised incentives for SG pilot projects. In the following, the study performs parametric and nonparametric statistical hypothesis testing to investigate the correlation between the level of SG pilot investments and the factor-levels, for each one of the three regulatory factors respectively.

JEL Classification

L51, L94, L95

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Developing a Framework for Standardising and Harmonising Intermodal Terminal Concession Contracts

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Keywords

Freight transport; Port; Concession; Devolution; Tender; Governance; Intermodal terminals; Regulation; Policy; Rail; Freight; Risk; World Bank

Abstract

Much effort goes into planning of freight infrastructure to achieve government policy aims of modal shift, and governments (and government-backed infrastructure managers and rail ministries) strive to make track access and other regulatory aspects of rail operations manageable and affordable in order to induce private sector operators to enter the market of rail service provision. However, as intermodal terminal concession contracts do not exhibit any universality of conditions, terminal operators may not be able to offer handling services at consistently low prices to the rail operators, who in turn will be constrained in their ability to provide regular reliable services to shippers and forwarders at prices competitive with road haulage. When terminal users do not have confidence of stable and standard conditions across the network, potential service coverage may be constrained as certain terminals are favoured. Performance monitoring processes with defined key performance indicators are essential aspects of port terminal concessions and ones that frequently leads to legal disputes when such terms are contended partway through a concession timeframe. If intermodal terminal concession agreements do not incorporate such elements, the usage of intermodal transport may be reduced, threatening the achievement of government modal shift policy targets.

Increasing standardisation has been essential to the development of intermodal transport, not only in the physical standards of containers and handling apparatus, but in domestic and international regulation, in business practice and information sharing, and in supply chain integration through

mergers and acquisitions. One important element of the above is the management and operation of intermodal terminals. Likewise, the rise in port efficiency in recent decades has resulted not solely from standardisation of equipment (e.g. container types, handling equipment, cellular holds in container vessels) but changes in management structure and the harnessing of private sector investment. It is not yet clear if such advantages have been fully exploited in the intermodal sector; application of a standardised framework can, therefore, enable identification of sources of inefficiency that need to be addressed through better tendering procedures.

Tendering procedures for concession of port terminals to private operators have been the subject of considerable interest during the last decade. As a consequence, keys to effective port governance, particularly the landlord model, are fairly well understood, even standardised to some degree. By contrast, intermodal terminal contracts have been found to be quite varied, with little standardisation of procedures, requirements, risks, incentives or contracts even within a single country.

The goal of this paper is to apply lessons from the study of port terminal concession contracts to the intermodal sector. The World Bank port reform toolkit is used to create a conceptual framework, which is then matched against five intermodal terminal concession contracts from Sweden. The analysis reveals where potential weaknesses and uncertainties in intermodal tendering processes and contracts can benefit from clear lessons from similar processes and contracts in the maritime sector.

Findings from the research show that the port concession framework can be applied successfully to intermodal terminals, and the framework facilitates identification and comparison of deficiencies. Such analysis can be useful both to public sector managers seeking the best concession for their terminal, as well as private sector terminal operators seeking the most appropriate and profitable location to enter the market in a particular country or region.

This research is exploratory, thus this paper provides the first step in addressing this topic and introducing a degree of standardisation. Now that a framework has been developed in this paper, future research is needed to apply the findings in other contexts in order to refine the framework further. Such research can identify if there are differences between countries, and to what degree processes of standardisation have been implemented and how successful they have been, with a view eventually to develop a global standard such as that used in the port sector.

Acknowledgements

Research for this paper was conducted with the financial support of the European Union, through the GreCOR project, funded by the ERDF Interreg IVB North Sea Region Programme, The Swedish Transport Administration and The Sustainable Transport Initiative provided finance from the Swedish Government.

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Regulatory reform in the Brazilian railway sector and concessions valuation – a preliminary assesment

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Keywords

Railway concessions, regulation, demand risk, unbundling

Abstract

In this paper we analyze, from the perspective of a firm that owns a concession, the potential effects on its value due to possible changes in Brazilian railway regulation. The current model is vertically-integrated while the new model will provide unbundling and a new role for the state-owned company VALEC, which shall act as a kind of intermediary, buying the whole capacity from infrastructure owners and offering it publicly for independent operators, assuring rights of way for trains throughout the railway. At the same time we try to understand the relationship among the

stakeholders involved if changes in the regulatory framework occurs - firms, the government and final consumers, and who would benefit from the changes. Our preliminary results indicate that the “new” model may damage both concessionaires, which will have diminished the firm value, and the State/government, which will bear excessive fiscal costs.

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Rail regulation in Europe: an industry-based survey

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Keywords

Regulation, Railways, Competition, Cost, Structure

Abstract

European railways have been shaped by multiple reforms in the last decades, concerning their structures, competition levels and regulatory profiles. While great focus has been placed by the literature on analysing whether railway transport might have been revitalised by the larger variety of organisational choices available and the higher degrees of contestability, little consideration has been attracted by the study of the evolution and impacts of regulation. This paper aims at filling the gap, detecting which regulatory practices and patterns have been pursued at domestic and continental levels. This analysis is based on the design of a questionnaire on rail regulation, collecting first-hand evidence from 18 between regulators, infrastructure managers and railway operators across Europe. The questions take into account the findings of a specific literature review on a set of ideal characteristics germane to regulators in railways and comparable industries.

The emerging picture reflects a certain complexity. Regulators seem to have achieved the necessary requirements in order to effectively operate. Independence is guaranteed on paper and in action, high levels of transparency render regulators accountable, and when intervention is requested, their responses appear prompt. On the other hand, the approval of track access charging schemes, together with the monitoring of the efficiency and quality of the infrastructure managers' performances, only

at times fully involves the regulators. Therefore, the related watchdog function turns out to be formally strong and substantially rather weak for most regulators in our sample.

Regulatory bodies are incisive mainly in competitively open contexts and when pressure on the infrastructure managers can be exerted. Instead, in those domestic systems characterised by low competitive levels and strong governmental presence, regulators' position may not be seen as truly significant or worthy of better resources and powers. These interdependencies between regulation, structure and competition of a railway system are crucial to better determine which role regulators are entitled to play.

Acknowledgments

The authors gratefully thank the members of the Community of European Railway and Infrastructure Companies (CER) Economics Group and the Independent Regulators' Group – Rail (IRG) Charges Working Group, as well as the individual regulators contacted directly, for the extremely valuable feedback and responses offered to our questionnaire and research.

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Regulatory contracts and cost efficiency: the French urban public transport case

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Keywords

urban public transport, efficiency frontiers, incentive regulation, cost efficiency, economics of regulation

Abstract

The goal of this paper is to study the impact of different regulatory contracts on the operating costs of the urban public transport industry in France throughout the years 1995-2010. In particular, regulatory choices are considered to be endogenously determined choices. The paper leans on a positive analysis to study the determinants of regulatory contract choices, which in turn impact the costs of operating urban public transport. The results show that given similar network characteristics, networks operated under fixed-price contracts exert lower costs than those regulated under cost-plus contracts. This finding is in line with the theoretical prediction of new regulatory economics, that fixed-price contracts provide more incentives for efficiency. In addition, several elements advocated by the private-interest theory appear to be relevant in the industry. Our findings provide useful policy implications by suggesting that significant reductions of costs can be obtained by switching to mechanisms with high-powered incentive schemes. Moreover, they highlight the importance of accounting for the endogeneity of regulatory contract choices. Ignoring this aspect could lead to undervaluing the importance of regulatory incentives for the transport operator.

JEL Classification

C21, L51, L92

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An assessment of water utilities efficiency using the Portuguese case

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Keywords

Water utilities, efficiency, Portugal.

Abstract

In this paper we study the determinants of performance in the water industry in Portugal. We use a set of performance indicators on financial and quality of service indices, regressing these and an overall composite index on a set of explanatory variables. We find evidence that the PPPs in the water industry in Portugal provide better services than the state-owned providers, but are not necessarily in better financial shape. We also find evidence that Portugal's fast track to build infrastructure in this area paid off, as the age of the concessions positively affects the financial performance. The regressions also indicate that the recent financial crisis did not significantly affect the companies operating in the industry, but recent developments in enhancing the quality of service are paying off. This paper helps better understand the water sector in Portugal and provides solid evidence that there is room for the different possible models of concessions: PPP, state-owned companies or government run services.

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External constraints of the local regulator and pricing : an empirical evidence from water distribution in France

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