Klaus Mathis Avishalom Tor *Editors* 

# Law and Economics of Regulation



#### **Economic Analysis of Law in European Legal Scholarship**

#### Volume 11

#### **Series Editor**

Klaus Mathis, Faculty of Law, University of Lucerne, Lucerne, Switzerland

#### **Editorial Board Members**

Pierluigi Chiassoni, University of Genova, Genova, Italy

Péter Cserne, University of Hull, Hull, UK

Bruno Deffains, University of Paris II - Sorbonne Universities, Paris, France

Thomas Eger, University of Hamburg, Hamburg, Germany

Mariusz J. Golecki, University of Łódž, Łódž, Poland

Andreas Heinemann, University of Zurich, Zurich, Switzerland

Régis Lanneau, University of Paris Nanterre and Sciences Po Paris, Paris, France

Aurélien Portuese, De Montfort University Leicester, Leicester, UK

Kai Purnhagen, University of Wageningen and Erasmus University Rotterdam, Wageningen, The Netherlands

Lucia A. Reisch, Copenhagen Business School, Copenhagen, Denmark

Anne-Lise Sibony, University of Louvain, Louvain-la-Neuve, Belgium

Endre Stavang, University of Oslo, Oslo, Norway

The purpose of this book series is to publish high quality volumes in the growing field of law and economics research in Europe, from a comprehensive theoretical and practical vantage point. In particular, the series will place great emphasis on foundational and theoretical aspects of economic analysis of law and on interdisciplinary approaches in European Legal Scholarship. Following Nobel laureate Ronald Coase's famous essay "The Problem of Social Cost" (1960) fifty years ago law and economics has become the lingua franca of American jurisprudence. In recent decades, law and economics has also gained widespread popularity in Europe and its influence on Legal Scholarship is growing significantly.

Therefore, the economic analysis of law in European Legal Scholarship academic book series illustrates how law and economics is developing in Europe and what opportunities and problems – both in general and in specific legal fields – are associated with this approach within the legal traditions of European countries. Rather than further exploring economic analysis as such, the main focus of this series lies on the implementation of economic methods in legislation and legal adjudication from a European perspective. It takes into account the particular challenges the European legal systems face. Volumes will address law and economics research in Europe from a critical and comparative viewpoint. The studies in this series are strong and bold narratives of the development of economic analysis of law in European Legal Scholarship. Some are suitable for a very broad readership.

Contributions in this series primarily come from scholars in Europe. The purpose is to provide the next generation of European lawyers with the models and skills needed to understand and improve the economic analysis of law in their own legal field. The series includes monographs focusing on specific topics as well as collections of essays covering specific themes.

More information about this series at http://www.springer.com/series/11927

Klaus Mathis • Avishalom Tor Editors

# Law and Economics of Regulation



Editors
Klaus Mathis
Faculty of Law
University of Lucerne
Lucerne, Switzerland

Avishalom Tor School of Law University of Notre Dame Notre Dame, IN, USA

Economic Analysis of Law in European Legal Scholarship ISBN 978-3-030-70529-9 ISBN 978-3-030-70530-5 (eBook) https://doi.org/10.1007/978-3-030-70530-5

@ The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer Nature Switzerland AG 2021

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors, and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG. The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

#### **Preface**

This edited volume "Law and Economics of Regulation" is a collection of papers which were due to be presented at the 9th Law and Economics Conference in Lucerne on the 27th and 28th of March 2020, co-organised by the University of Lucerne, Institute for Economy and Regulation, and the Notre Dame Research Program on Law and Market Behavior (ND LAMB). Unfortunately, due to the global COVID-19 pandemic, the conference could not take place. Irrespective of these unfortunate circumstances, the editors and authors have created an edited volume on the current issues associated with economic analysis of regulation.

The main focus of this volume is on presenting European legal scholars' perspectives on the issues surrounding the Law and Economics of Regulation. These are complemented by insights from distinguished scholars from the USA, Israel, and New Zealand in order to foster the international dialogue among the different legal cultures. The thematic scope of this volume spans both the theoretical foundations and specific practical applications of the Law and Economics of Regulation.

We take this opportunity to thank all those who have contributed to the successful completion of this volume. Therefore, we would like to thank Lynn Gummow, MLaw, Lyanne Elsener, BLaw, Roger Moser, BLaw, Marc Schillig, BLaw, and Philipp Gisler for their reviewing and diligent proofreading. We are also grateful to Manuela Schwietzer at Springer Publishers for overseeing the publishing process.

Lucerne, Switzerland Notre Dame, IN, USA December 2020 Klaus Mathis Avishalom Tor

#### **About This Book**

Regulation today has grown into one of the main determinants of the modern economy. Nearly every sector—financial service providers, pharmaceutical companies, automotive manufacturers, food and beverage producers, travel agencies, social media platforms, and more—is subject to specific rules and standards in addition to general laws and regulations applicable across industries. The typical rationale for regulatory intervention is the promotion of the public interest. Fixing markets that lack competition, balancing information asymmetries, internalising externalities, mitigating systemic risk, or protecting consumers from irrational behaviour are frequently invoked both to substitute for and to complement the invisible hand of the market with the visible hand of the state.

Traditionally, law and economics literature has taken a mostly sceptical stance towards state interference and its justifications, from both normative and positive perspectives. In the late 1960s, Harold Demsetz criticised what he called the Nirvana approach to economics, i.e. the attempt to impose regulation whenever a difference between reality and a theoretical optimum is identified. Instead, he advocated a comparative institutional approach, according to which the institutional setting should only be amended if doing so actually yields preferable results. However, because regulation often yields unintended consequences, one should be hesitant to view regulation as the panacea that could turn an imperfect world into paradise. Not long thereafter, a second strand of economic thought championed by Stigler and others called into question the public interest rationale as the main driver of regulatory growth, suggesting instead that much regulation, in fact, serves the private interest of powerful interest groups rather than advancing social welfare.

Since the early contributions of Demsetz and Stigler, the debate over the law and economics of regulation has raised many questions whose implications span a variety of legal fields and almost every major economic sector: To what extent do different regulatory goals such as data privacy, environmental protection, or safety require different regulatory strategies? Which regulatory instruments should be implemented under different market conditions? What drives public agencies when they enact and enforce regulation? Is sectorial self-regulation a viable and

viii About This Book

legitimate alternative to regulation through government agencies? Which sanctions are most effective? This volume aims to explore theoretically and empirically these and related timely issues in the regulation of various economic sectors, from both the neoclassical and the behavioural economics approaches to regulation.

Part I of this volume, "Law and Economics of Regulation Theory", begins with the chapter "Public Services as a Strategy of Regulation" by Régis Lanneau. He analyses whether public services should be considered as a regulatory strategy instead of a service provided by the state. In doing so, he argues that public services and regulation cannot be regarded as two separate state interventions. The regulatory strategy employed reflects a command and control element coupled with some form of compensation. Subsequently, the author discusses the practical implications that such a reframing of public services would mean. Firstly, with regard to efficiency implications. Secondly, regarding the reach public services would have - if considered as a regulatory strategy.

The next chapter "Sectoral Self-Regulation as Viable Tool" by Rolf H. Weber analyses the strengths and weaknesses of self-regulation. Using distributed ledger technology as an example, he argues that a co-regulation approach relying on self-regulation together with a normative framework would provide the most efficient regulatory approach in technological fields. This is in part due to the flexibility such an approach offers to the fast-changing environment. What's more, he argues that the efficient involvement of all private and public actors affected by the rules is best invested in developing the regulatory framework while at the same time promoting innovation and competition in the given technological environment.

Yuval Feldman and Yotam Kaplan identify and discuss the existence of "ethical blind spots" in their chapter "Ethical Blind Spots & Regulatory Traps: On Distorted Regulatory Incentives, Behavioral Ethics & Legal Design". These are areas where, normally, law-abiding people fail to recognise their illegal and unethical conduct. While regulators should act to increase the ethical awareness to encourage compliance, they often have a greater incentive to protect the blind spots. The authors analyse this problem by looking to behavioural economics in order to identify why these blind spots exist and why regulators may not remedy this situation.

In "Law and Economics in Russian Law", Mikhail Antonov discusses the development of the Law and Economics movement in Russia. He begins his chapter by outlining the historical context of the Russian legal system and discussing the influences that Soviet Law had on the development of Russian Law, in particular the attitude towards the economic analysis of law. The early developments of post-Soviet law saw a rejection of economic analysis of law due to its association with Marxist based teachings. This distrust was further compounded by the actions of corrupt officials, who overruled the statutory law by using economic arguments as justification. With the introduction of the "Oligarch Policy" by Vladimir Putin in his first presidency, economic rhetoric was banned from courts and with it the economic analysis of law. Despite more recent interest among Russian Legal Scholars in the economic analysis of law, the use of it in courts is still treated with suspicion due to the historical connection to corruption.

About This Book ix

Part II of this volume "Specific Applications of Law and Economics of Regulation" begins with Shmuel I. Becher's chapter "Key Lessons for the Design of Consumer Protection Legislation" that discusses the limitations of the legislative process. Starting from the standpoint that legislation can often fail to provide the desired result and sometimes achieve unintended consequences, he describes the key weaknesses of the legislative process. Using consumer law as an example, the unintended harms the consumers encounter are described. However, the author also identifies four principles, which he argues should improve the legislative process and prevent such failures. These four principles are: a more gradual and cautious approach, a multidisciplinary, evidence-based approach, a more humble decision-making process approach relying on temporary protection laws as opposed to more permanent legislation, and finally, he argues for a diffuse legislative approach delegating legislative and policy responsibility to administrative agencies or consumer organisations. The author draws on examples of different approaches to consumer law found in Europe, North America, Australia, New Zealand, and Israel.

"Regulation of Information About Unfolding Events in Securities Markets: A Behavioral Economics Perspective" by Ido Baum, Jaroslaw Beldowski, and Dov Solomon compares and contrasts the security market regulations in Europe and the USA. In particular, they focus on the regulations surrounding disclosures and analyse these from a behavioural economics perspective. The particular challenge posed is the disclosure of material unfolding events. The most significant differences between the two legal approaches rely on the definition of what information is considered to be material, and whether or not the disclosure of such information is mandatory or voluntary. The authors argue that cognitive biases, such as overconfidence, overoptimism, among others, influence the disclosure side, while conservatism, availability bias, or the ostrich effect influence the investor side. Against this background, the different legislative approaches pursued by the USA and Europe lead the authors to conclude that the disclosure architecture of both systems ought to pursue a more nuanced approach to take biases into account.

Mira Burri examines the data protection regulation in the context of global trade law in her chapter "Data Flows Versus Data Protection: Mapping Existing Reconciliation Models in Global Trade Law". The chapter begins by outlining various legal frameworks regarding data protection, as well as comparing and contrasting the EU regulation with the regulation in the USA. Subsequently, the author turns to the data protection rules that have emerged through free trade agreements as a result of the lacking regulatory framework from the World Trade Organisation. This analysis shows the tension between free data flows, which are considered essential in today's data-driven economy, and the states' duty and sovereign right to protect its citizens' privacy.

"The Concept of Regulatory Arbitrage" by Thomas Coendet discusses the practice of economic agents structuring their activities in such a manner as to optimise their gain by utilising the more favourable regulatory framework. In particular, the author discusses this practice within the finance background. The chapter provides a conceptual framework for the practice of regulatory arbitrage. He describes three of the most common regulatory arbitrage situations: choosing between different

x About This Book

jurisdictions; choosing between different sets of regulation, and actively avoiding certain regulation. However, he argues that these are not simply cost—benefit analysis or regulatory avoidance decisions. Instead, the more complex economic and sociological background illuminated in this chapter shows that financial arbitrage is a more realistic concept than previously described.

Moran Ofir and Yevgeny Mugerman analyse the impacts that macroprudential tools have on the decision-makers in the mortgage market. Their chapter "(Un)-intended Consequences of Macroprudential Regulation" describes the changes in the housing market in Israel. The unprecedented increase of house prices and rent costs has resulted in various regulatory approaches to impose restrictions to ensure the stability of the financial system and avoid a housing market crash akin to the global financial crisis in 2008. They begin with a theoretical behavioural analysis of the mortgage decision-making process. Against this background, the authors then analyse the empirical data provided by the Israel Central Bank to understand how the macroprudential policy tools influence the mortgage market. In particular, they follow the borrowers' responses to the Loan-to-Value Limits, changes in the required capital adequacy of the banks, and the different provisions regarding payment-to-income, among others. They conclude that the regulatory provisions showed to have a lesser impact on the borrowers' decision than expected by the regulator.

In his chapter "Precautionary Antitrust: A Precautionary Tale in European Competition Policy", Aurelien Portuese argues that the new approach advocated by the European Commission for competition enforcement towards digital markets is an application of the precautionary principle. The Commission's approach, he argues, is neither a policy error nor a legal flaw—it is a regulatory preference for precaution over innovation and disruption. To substantiate this claim, the author begins by describing the precautionary principle and subsequently turns to a definition of precautionary antitrust. Against this background, he devises an explanatory framework as a guiding principle in the foreseeable trends in European and American antitrust enforcements.

The chapter "Regulation and Deregulation of Financial Markets from the Perspective of Law and Economics" by Mariusz J. Golecki discusses the traditional models used to regulate the financial market, namely: the transaction-oriented, institution-oriented, and market-oriented model. To best understand why the market-oriented model has become the more prevalent, the author illuminates the evolution of the law, particularly focusing on the changes in the USA and comparing that to the recent regulatory shifts in Europe. He concludes that the financial crisis proved that good regulation is essential in the financial market. Furthermore, good regulation requires a sound normative theory of both the derivatives and investors' behaviour. Subsequently, the role of judicial governance in this field is discussed, concluding that it does play a significant role as an alternative to market and political processes.

Ann-Sophie Vandenberghe discusses the impacts of the regulatory change regarding income security for disabled workers in the Netherlands. Her chapter "Privatizing Income Security for Disabled Workers: Unintended Consequences About This Book xi

and Labour Market Imbalances" provides an in-depth analysis of the Dutch Government's move to privatise income security for disabled workers. She begins by outlining the challenges presented by the overuse of public schemes and the lack of support for reintegration into the workforce. Subsequently, the current regulations forcing private employers to continue to pay wages for sick employees for up to 2 years and the impact this regulation has had on the employment market are analysed. She concludes by making a clear case that while this regulatory change has achieved some improvements for employees, other aspects within the employment market have suffered from unintentional negative consequences.

The chapter "Regulating Innovation" by Markus Schreiber analyses the interplay of law and economics on innovation regulation. While innovation is one of the main drivers of economic growth, some of the regulatory attempts to encourage innovation have unintended consequences. A central question in this context is whether governments have a legitimate reason to interfere in the market by means of regulation, and if so, what is the economic rationale behind such regulation? The author elucidates and analyses in which instances governments have legitimate reasons to interfere in the market economy in order to promote innovation. In doing so, the impacts regulations have on innovation are examined before discussing the problems and economic consequences of legislators' attempts to promote innovation. The author concludes with a guideline for "best practices" for the furtherance of innovation through regulatory means.

The final chapter by James W. Coleman, "Matching Commitments: A New Approach to Regulation of the Commons" delves into the pitfalls faced by regulators with regard to protecting the climate while encouraging innovation. Climate change is a global problem that requires all countries to adopt a globally optimal level of climate regulation. A mere domestic approach will not achieve the required reduction in greenhouse gases nor provide sufficient incentives for other countries to tackle their emissions. To resolve this issue, the author proposes that the countries adopt a new strategy: climate matching commitments. Rather than relying on international treaties, prescribing unilateral reductions in greenhouse gas emissions, or cajoling other countries into taking the necessary measures, the author suggests climate regulations should automatically increase their response to regulations of other countries. So, instead of one country planning to cut its emissions by 40% by means of their domestic regulation, the regulator would commit to a lower emission with a promise to add to that specified reduction the same amount of reduction regulated by another key economy. This, the author argues, would encourage other countries to adopt more stringent regulations, as this would have a knock-on effect on others. This knock-on effect would ultimately benefit all. Such an approach would be more successful than continuing with the current international negotiation strategy, as each country is free to decide unilaterally what their baseline reduction would be.

### **Contents**

Part 1 Law and Economics of Regulation Theory	
Public Services as a Strategy of Regulation	3
Sectoral Self-Regulation as Viable Tool	25
Ethical Blind Spots & Regulatory Traps: On Distorted Regulatory Incentives, Behavioral Ethics & Legal Design	37
Law and Economics in Russian Law	55
Part II Specific Applications of Law and Economics of Regulation	
<b>Key Lessons for the Design of Consumer Protection Legislation</b> Shmuel I. Becher	73
Regulation of Information About Unfolding Events in Securities  Markets: A Behavioral Economics Perspective  Ido Baum, Jaroslaw Beldowski, and Dov Solomon	101
Data Flows versus Data Protection: Mapping Existing Reconciliation Models in Global Trade Law	129
The Concept of Regulatory Arbitrage	159
(Un)intended Consequences of Macroprudential Regulation	183

xiv Contents

Precautionary Antitrust: A Precautionary Tale in European Competition Policy	203
Regulation and Deregulation of Financial Markets from the Perspective of Law and Economics  Mariusz J. Golecki	233
Privatizing Income Security for Disabled Workers: Unintended Consequences and Labour Market Imbalances Ann-Sophie Vandenberghe	257
Regulating Innovation  Markus Schreiber	273
Matching Commitments: A New Approach to Regulation of the Commons	307
Index	317

#### **Contributors**

Mikhail Antonov Higher School of Economics, Saint Petersburg, Russia

Ido Baum Faculty of Law, Haim Striks School of Law, Tel Aviv, Israel

**Shmuel I. Becher** Faculty of Law, University of Wellington, Wellington, New Zealand

**Jaroslaw Beldowski** Economic Analysis College, International Comparative Studies Department, Warsaw School of Economics, Warsaw, Poland

Mira Burri Faculty of Law, University of Lucerne, Lucerne, Switzerland

**Thomas Coendet** KoGuan School of Law, Shanghai Jiao Tong University, Shanghai, China

**James W. Coleman** Southern Methodist University Dedman School of Law, Dallas, TX, USA

Yuval Feldman Bar-Ilan Law Faculty, Bar Ilan University, Ramat Gan, Israel

Mariusz J. Golecki University of Lodz, Łódź, Poland

Yotam Kaplan Bar-Ilan Law Faculty. Bar Ilan University, Ramat Gan, Israel

**Régis Lanneau** University of Paris Nanterre, Paris, France

Yevgeny Mugerman Bar-Ilan University, Ramat Gan, Israel

Moran Ofir Interdisciplinary Center (IDC) Herzliya, Herzliya, Israel

**Aurelien Portuese** Brussels School of Governance, Vrije Universiteit Brussels, Brussels, Belgium

Markus Schreiber Faculty of Law, University of Lucerne, Lucerne, Switzerland

**Dov Solomon** Commercial Law Department, College of Law and Business, Ramat Gan Law School, Ramat Gan, Israel

xvi Contributors

**Ann-Sophie Vandenberghe** Rotterdam Institute of Law and Economics (RILE), Erasmus School of Law, Rotterdam, The Netherlands

Rolf H. Weber Faculty of Law, University of Zurich, Zurich, Switzerland

# Part I Law and Economics of Regulation Theory

#### **Public Services as a Strategy of Regulation**



Régis Lanneau

**Abstract** When legal regulations are considered, it is very unusual to analyze public services as a regulatory strategy. They are certainly a way for the "state" to intervene in the economy but most efforts by academics, lawyers and policy makers focus on the way to regulate them-from the condition of their creation to their reach and impact on competition—using orthodox (e.g. command and control or economic incentives) or heterodox (e.g. mandated disclosure or nudges) regulatory strategies. Under this traditional conceptualization, public services should be defined by the nature of the service they are providing, the nature having then an influence on the regulation of that service. The purpose of this paper is to reverse our perspective of public services regarding their relation vis-à-vis regulation. Public services are not mere services which need to be regulated keeping an eye on the influence of that regulation on distortion of competition, they are, essentially, a type of regulation. Not only is this approach more coherent with the use of this notion by European institutions and its practical legal relevance, it also forces us to reconsider the relevance of public services (as a type of regulation) compared to other regulatory strategies. As any other regulatory strategy, it should be used if and only if it is the efficient way to achieve what the regulation is aiming for. Such a conceptualization thus contributes to a limiting of blind spots when the efficiency of a public service (considered as a service) is considered.

#### 1 Introduction

One of the main features of the modern welfare state is the provision of public services. From utilities (electricity, telecommunication, transportation, etc.) to healthcare, education and pension systems, from internal and external security to the development of a legal system, public services—used as a generic label to

include services of general interest, service of general economic interest, services of general social interest, etc.—are everywhere. It is of course possible to criticize their reach, their quality or their costs, to consider that these, or part of these public services should, or should not, be delegated to private entities, or to advocate for some modification in their legal regime. But it is impossible to criticize the fact that one of the main functions of the state is to provide, directly or indirectly, public services.<sup>1</sup>

Such statement is even easier to make since it is, if not meaningless, largely empty. Indeed, when considered more carefully, it appears that no accepted and workable definition of public services<sup>2</sup> exists or of what makes the "publicness" of public services<sup>3</sup>... so that it would be possible to equate state intervention with public service—especially if redistribution is considered as a public service—making the statement a mere tautology.

It could be possible, at this stage, to clarify the concept a little more so that it would be more workable, to engage into a critical analysis of all the different definitions of public services (and related concepts) which could be found in the literature, positive law or political statements. Such an analysis would certainly be enlightening. Indeed stressing that the "French" concept(s) of public services rests on the idea that the state pursues a superior end such that public services are inherently different from private services is crucial to understand the regulation of public services in France or the difficulties that French academics have when dealing with European concepts of services of general interest, services of general economic interest or universal service obligations<sup>6</sup> since the "aura" which goes with the "public service" disappears. It would be equally relevant to stress that the idea of public service in the British or American tradition is largely replaced by the concept of "public interest", probably more economic in its nature since it is linked to the idea of public welfare. But to identify and analyze a sufficient number of legal traditions while avoiding caricature is beyond the scope of this paper and largely irrelevant to the point it tries to make.

For the purpose of this paper, it suffices to state that the concept, is often defined through the nature of the services and, as such, it is legally open-ended: the definition of public services (or public interest) is too fuzzy to allow for a strict demarcation between what is and what is not a public service (positive definition) or what should or should not be a public service (normative definition). For example, the Commission's definition of service of general interest as service "that public authorities of the

<sup>&</sup>lt;sup>1</sup>For example, see Mueller (2003) and Buchanan (1965).

<sup>&</sup>lt;sup>2</sup>For example, see Sauter (2015), p. 10.

<sup>&</sup>lt;sup>3</sup>Pesch (2008).

<sup>&</sup>lt;sup>4</sup>For example, Prosser (2005).

<sup>&</sup>lt;sup>5</sup>Finger and Finon (2011).

<sup>&</sup>lt;sup>6</sup>Tourbe (2004).

<sup>&</sup>lt;sup>7</sup>For example, Finger and Finon (2011).

member states classify as being of general interest" is obviously open-ended and do not rest on a "feature" of the service but on the "will" of public authorities. Trying to break down public services between economic and non-economic public services is of no help. As the Commission explained in 2012:

Since the distinction between economic and non-economic services depends on political and economic specificities in a given Member State, it is not possible to draw up an exhaustive list of activities that a priori would never be economic. Such a list would not provide genuine legal certainty and would thus be of little use.<sup>9</sup>

The fuzziness of the concept of public services and related concept is also recognized by the European Court of Justice:

It must be made clear that in Community law and for the purposes of applying the EC Treaty competition rules, there is no clear and precise regulatory definition of the concept of an SGEI mission and no established legal concept definitively fixing the conditions that must be satisfied before a Member State can properly invoke the existence and protection of an SGEI mission. <sup>10</sup>

What is less open-ended (and thus more positive) is the fact that the legal qualification has an influence on the regulation. Article 106(2) of the TFEU states clearly that

Undertakings entrusted with the operation of services of general economic interest or having the character of a revenue-producing monopoly shall be subject to the rules contained in this Treaty, in particular to the rules on competition, insofar as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them.

For example, state aids are compatible with the Treaty if they are there to "compensate" some public service obligation (infra). It is also possible to grant some exclusive rights if these rights are required for the provision of the public service. In any case, being a "public service" does not automatically allow for a complete exemption of competition law. It is only insofar as the restriction of competition is necessary to ensure that the service can be provided under economically acceptable conditions that such restriction will be judged as compatible with the treaties. This provision of the TFEU should of course be interpreted in the context of economic liberalization which sets the default on market allocation of good and services and is more suspicious of state intervention. In this context, state provision of goods and services should be justified (from an economic point of view by market failures or social or territorial cohesion) and the question of the regulation of such provision becomes fundamental.

The purpose of this paper is not to offer new insights regarding the regulation of public services or to alleviate conceptual difficulties when public services are conceptualized through their nature. It is to reverse the perspective touched upon in the previous paragraph and explore the idea that "public service" is a strategy of

<sup>&</sup>lt;sup>8</sup>Comm (2011), 900, p. 3.

<sup>&</sup>lt;sup>9</sup>OJ 2012, C8/02 (2012); see also 2016/C 262/01 (2016), para. 14.

<sup>&</sup>lt;sup>10</sup>Case T-289/03 (2008), para. 165.

regulation; that it is probably too artificial to consider regulation and public services as two different types of state intervention. This idea follows from the Commission's definition of service of general interest. Indeed, not only is the Commission stating that service of general interest (SGI) are services "that public authorities of the member states classify as being of general interest", it also adds "and, therefore, subject to specific public service obligation". Wouldn't it then be possible to consider that what makes a public service is the presence of public service obligations, such that it is the legal regime—the concept of public service obligation remains fuzzy—and not the "publicness" of the service or of the obligations which determines what is considered as a public service? Surprisingly, this reconceptualization has not yet been offered in the literature on public services. In France, the opposition between the welfare state and the regulatory state still constitutes the mainstream approach. 12

This new perspective certainly has a theoretical value. Indeed, if public service is a regulatory strategy, all state intervention could be analyzed through the same framework; there would not be any reason to "treat" public services in a different way than an environmental, safety or price regulation: their justification or relative efficiency could then be assessed in the same way. The "public service" is simply an option in a continuum of regulatory strategies; what should matter is only the efficiency of the regulation (at least from an economic point of view). Moreover, such a reconceptualization seems perfectly compatible with positive law and its evolution (since it is built on it). This conceptual exploration is also not without practical consequences: integrating "public services" within regulatory strategies will emphasize the possibility to use other strategies to achieve what public services try to achieve thus opening the box in which the conceptualization of public services through the "nature" of the service rendered confined legal reasoning. For example, this reconceptualization will have an influence on the "reach" of public services (infra, Sect. 3.2).

The purpose of this paper is to explore the characterization of public services as a type of regulation (Sect. 2) and some of its consequences regarding the assessment of the efficiency of this regulatory strategy (Sect. 3). As such, this paper does not seek exhaustivity on both topics, it merely tries to set the building blocks for a reconceptualization of public services as a regulatory strategy.

Before addressing these issues, for the sake of clarity the understanding of regulation which will be used in this paper and the legal framework on which this analysis is resting must first be specified.

In this paper regulation will not be understood<sup>13</sup> as broadly as to integrate legal and social mechanisms of social control. The traditional definition by Selznick ("sustained and focused control exercised by a public agency over activities that are valued by the community") will also not be used, not only because it is too

<sup>&</sup>lt;sup>11</sup>Comm (2011), 900.

<sup>&</sup>lt;sup>12</sup>For example, Chevallier (2004).

<sup>&</sup>lt;sup>13</sup>Selznick (1985).

narrow since only public agencies are considered. But also because it is not concentrated on the means to achieve such a regulation. It also includes the "valued by the community" which makes the definition not fully operational. It will be defined in a more "positivistic" way as all the mechanisms used or established by the government (*lato sensu*) in order to (try to) control or harness the forces of supply and demand in a market. This definition, which draws on Stigler<sup>14</sup> is still broad and includes all control regarding the agents allowed to enter the market, the market price, the quality of the product, the selling condition, etc. but also regulation regarding health, safety and the environment.<sup>15</sup> It is, however, as axiologically neutral as possible and more characterized than a definition resting on the idea of social control.

The concept of public service will be analyzed in this paper by reference to European law and the related concept of service of general interest and services of general economic interest but also universal service obligation and public service obligation. I am convinced that the reconceptualization of public service as regulatory strategy could offer more clarity in the legal concepts used at the level of the European Union.

#### 2 Public Service as a Type of Regulation

Like any other type of regulation, public services are concerned with the allocation of resources which would result from a situation of free market or, more precisely, a situation of non-intervention. Its purpose is obviously to influence the allocation of certain resources to make sure that they will not be allocated following a market logic, for example in order to ensure territorial or social cohesion (e.g. uniform price for electricity). Like any other regulation, public services are ways to harness the forces of supply and demand because it has an impact on the agents allowed to enter the market (e.g. legal protection could be offered to operators subjected to PSO), the market price (since public service is a type of price regulation, infra), the quality of the product (or its minimum quality; e.g. continuity), the selling condition (e.g. equal treatment or neutrality), etc.

It appears, through an analysis of positive law, that public services are a regulatory strategy which couples command and control regulation (or obligations backed by a sanction) (Sect. 2.1) with some compensatory mechanisms associated with the fulfillment of these obligations (Sect. 2.2). This latter feature is probably what characterizes the strategy "public service" compared to other types of command and control regulation.

This approach fully follows EU law since it merely translates the legal regime of public services. Indeed, SGI (be they service of general economic interest (SGEI) or social services of general interest (SSGI)) are defined by the existence of public

<sup>&</sup>lt;sup>14</sup>Stigler (1971).

<sup>&</sup>lt;sup>15</sup>Breyer (1982).

service obligations (PSO) and the existence of PSO is offering the possibility to compensate for the "charges of public service" without that compensation to be automatically qualified as a "state aid". It could even be possible to consider that PSO are defined by the possibility for these obligations to be compensated (for reason which will be explained in Sect. 2.2).

## 2.1 Public Service as a Type of Command and Control Regulation

Orthodox regulatory strategies are often divided between command and control strategies and economic incentives strategies. <sup>16</sup> The first ones rely on obligations backed by sanctions according to a classic Austinian understanding of the working of laws. <sup>17</sup> The second ones do not command anything; they merely incentivize through the creation of property rights or positive or negative taxation. Within this framework, public service strategy is a type of command and control regulation: it is a set of obligations backed by sanctions. Indeed, the operators submitted to PSO do not, in general, have the option to escape from their obligations. It does not mean that it would not be possible to conceptualize to structure PSO around an economic incentive strategy. Indeed, in Australia, but also in Finland and Belgium, the system of "pay or play" (pay a tax or assume public service missions) is closer to economic incentives strategies (see infra Sect. 3.1).

Like for any other command and control regulation, the purpose of "public service obligation" is to force (and not just to incentivize) operator(s) subject to the regulation to adopt a behavior they "would not assume if it were solely considering its commercial interest" or assume to the same extent or under the same conditions. Defining a public service obligation in this way—which is often the way it is defined in the literature because of the definition adopted by the Council—is not sufficiently specific: any command and control regulation constraints operators in the way they provide goods and services and most command and control strategy are justified by some form of a public interest (otherwise, what would be the point of the regulation?).

Defining PSO by the content of the obligation it sets is also not satisfactory; it is sometimes unclear, when an obligation is considered, if that obligation is a PSO or not. In the energy sector, for example, it is possible to create a duty to supply on request. This obligation could be a regulation applicable to all distributors of energy or it could be considered as a PSO. When energy efficiency regulations are considered, it could also be a sectorial (simple) regulation or a PSO. When rules are trying to ensure security of supply, it could also be considered as a sectorial regulation or a

<sup>&</sup>lt;sup>16</sup>For example, see Baldwin et al. (2012) and Breyer (1982).

<sup>&</sup>lt;sup>17</sup>Austin (1832).

<sup>&</sup>lt;sup>18</sup>Council Regulation (EEC) No. 2408/92.

PSO. Even when rules are set for ensuring equality of treatment over a geographical area (which could be the national geographic area) this could be considered as a mere price regulation or as a PSO. The same thing could apply for regulation regarding the environment (mandating that buses—or certain types of buses—should only be hybrid buses; mandating that farmers are farming more than one crops when the size of their farm is above a certain threshold), security of some infrastructure, or a certain fuel mix (producers of energy should produce at least 10% of energy from renewables could be a PSO or a mere sectorial regulation), etc. It could be possible to include considerations regarding efficiency to operate a distinction between when PSO and when mere regulations are "better", but this would then rely on other specificities of PSO and not only on the content of the obligation(s) (infra Sect. 3.1).

Sometimes, it seems, on the face of the obligation, that it is more likely to be a PSO. In the transportation sector, when there is an obligation to exploit a specific route including clauses regarding the frequency, timing of the service, or maximum permitted fare, this obligation is most probably a PSO. In other words, when the obligation is only targeting one operator in a market (except if it is a monopoly) or a small subset of operators, the presumption is that the obligation is a PSO. However, it is not because of the content of the PSO, it is because imposing a set of constraints on certain operators but not on other "similar" operators seems to be incompatible with the idea of free competition and maybe also the "rule of law" (since generality is a fundamental condition). It is certainly for that reason—as it will be explained below (infra Sect. 2.2)—that compensations are not only possible, but also probably required, to ensure the legality of the obligation.

In order to qualify a strategy as a "public service" strategy, it is possible to go one step further: PSO could be considered as a set of obligation plus a set or constraints on the pricing policy of operators; the combination of obligations could then help to identify when an obligation is a PSO or not. Indeed, quite often PSO and "public services" are linked with the idea of "affordability". 19 It is thus not sufficient to create obligations regarding the quality of a package of products or services; it is also required to constrain the pricing policy of the operators delivering these packages or part of these packages. Without such a constraint, the prices will simply evolve with the costs imposed by regulatory constraints. More constraints mean higher costs, and nothing would distinguish a classic obligation from a PSO. For example, forcing buses to use hybrid technology would only lead to an increase in price for consumers and the "affordability" of the service would then not necessarily be matched. When the cost of supplying the service is different depending on geographical characteristics (urban vs rural for example), without pricing constraints, prices charged will be different depending on consumers (rural consumers will pay more than urban ones to be connected to some infrastructures such as electricity). Moreover, affordability will not be ensured for some consumers (the cost could be "too" high and therefore out of the budget for rural consumers). Furthermore, the concept of affordability as a legal or as an economic concept is far from easy to define. If affordability is

<sup>&</sup>lt;sup>19</sup>For example, COM (2003), 270 final, paras 49, 60.

imposed—as it seems to be the case for any public service—, it means, logically, that some—or all—consumers will benefit from the service or the good without paying (if we are only considering direct payment) for its "true" cost (prices will be below cost for these consumers). For example, supplying electricity in non-interconnected areas is extremely expensive. It is possible to impose a uniform pricing structure for electricity on a national territory, but this will imply that the consumers on non-interconnected islands will pay an electricity price well below the actual costs of serving their demand. Moreover, if affordability and universality regarding prices charged are imposed, obligations regarding the quality of the service are required since, otherwise, the quality will vary with the type of consumer! For example, it would be possible to limit the service offered in non-interconnected areas to the strict minimum (with a lenient concept of continuity) in order to lower the costs of serving this demand.

From that point of view, public services are mostly a type of price regulation which, to remain on topic, is combined with conditions regarding the quality of the good or the service delivered.

The approach discussed thus far seems to only target SGEI. Indeed, we assume that PSO concentrates on entities which already provide (and will continue to provide) goods and services subjected to PSO. The PSO will then only force them, or some of them, to provide goods or services with a different quality, to expand the range of goods and services offered, and to sell the good or the services to some consumers at a loss. Actually, the approach developed could also apply to "noneconomic" SGI. Indeed, as the Commission said, "economic" and "non-economic" depends on political and economic specificities (supra), the relevance of the distinction should therefore not be overestimated. Of course, it would be possible to stress that in the case of a SGEI, competition law should apply and exceptions to competition law are possible; it is after all for that reason that the concept of PSO has been developed. However, applying this framework to "non-economic" SGI would not change things. Indeed, at an abstract level, it is not because a SGI is not a SGEI that no obligations are set regarding the quality of the service (e.g. right to trial within reasonable time) or the way it is delivered (e.g. principles of equality, continuity and neutrality in France). It is not because a SGI is not a SGEI that there are no constraints regarding the pricing of the services (e.g. the price of passport or of an ID card is the same all over France; appointment should not—officially—follow a supply and demand logic; the direct monetary price paid by consumers for an intervention by the police or fire service is the same and often equal to zero; the price for filling a complaint is also the same). Sure, from a technical point of view, calling these obligations PSO is not required: exception to competition law are linked with the "non-economic" nature such that there is no need to justify exception to competition law through PSO. However, it is also possible to consider that, in the realm of "non-economic" services, PSO always justify an exception to competition law. Moreover, in this paper, public service is considered as a regulatory strategy and from that point of view, SGI be they economic or not, could be conceptualized as a set of obligations regarding the quality of the service or the way to delivered it coupled with a set of constraints regarding the pricing policy of the operators delivering the service or the good.

For now, we characterized public service as a strategy of regulation without considering specific legal constraints on the type of obligations which could be imposed or the relative efficiency of that strategy. The latter problem will be addressed in the last section of this paper (infra, Sect. 3). The former is what justifies compensation mechanisms: to be "legal" (or simply to have a meaning) some obligations require a compensation scheme. The fact that the obligations set have to be compensated is certainly the defining feature of public service as a strategy of regulation. It is important to note, that the component of public services as a strategy of regulation (content, price constraint, compensation) should be considered not in a sequence but as a totality to use that strategy efficiently (infra Sect. 3).

## 2.2 The Specificity of Public Service as a Type of Command and Control Regulation, the Existence of Compensation Mechanisms

If there is a ban of non-hybrid buses in a certain area, it is, in general, not required to compensate buses operator(s) for that ban. However, if a mayor is including as a PSO the requirement that public transport in their town must be "hybrid", compensation is to be expected, especially if the pricing structure of public transports is not adjusted. The fact that the set of obligations imposed are compensated is probably the main feature of public services as a strategy of regulation. Without compensation, an obligation cannot really be a PSO.<sup>20</sup> This compensation could be a financial compensation (e.g. a sum money or a tax break) or a structural one (e.g. granting a monopoly or special rights like a reserved sector to facilitate cross-subsidization).

Traditionally, these compensations are considered as the main problem when the regulation of public services is addressed (and it is not definitive of a PSO). Indeed, there is a risk that the compensation will offer a competitive advantage (or disadvantage) to the operator in charge of the PSO. The question is then to identify and implement schemes which will be considered as legal following the conditions set in Altmark (Case C-280/00, para. 87–93):

- 1. the presence of clearly defined PSO,
- 2. objective,

<sup>&</sup>lt;sup>20</sup>Surprisingly, the Commission considers that certain SGEI could be provided "without specific financial support" (Communication from the Commission on the application of the European Union State aid rules to compensation granted for the provision of services of general economic interest (2012/C, 8/02, para. 2)). The only way to make sense of such a statement is to consider that the compensation exists through an institutional structure like a "reserved sector" or some other structural benefits (like loans warranties, etc...).

3. transparent and established in advance parameters for calculating the compensation,

- 4. a compensation that is not exceeding what is necessary to cover all or parts of the costs incurred by the supply of a public service,
- 5. and a condition regarding the way to set the compensation in the absence of a public procurement procedure.

If public service is conceived as a type of regulatory strategy, the perspective changes. As it has been established previously, public service is a type of regulation which combines an obligation regarding the product or the way it is sold with some constraints regarding the pricing policy of the operator(s). This combination means that at least a small fraction of consumers are served at a price below costs (which is also a characteristic of a public service). In other words, a public service strategy, if we only consider its command and control side, imposes some "costs" which cannot be recovered (fully or in part) by the operator(s) in charge of that public service (because of the constraints on the pricing policy).

Without compensation(s), three regulatory risks exist:

1. The first risk is simple to understand: without compensation, the PSO could never be abided by or, and it is the same, the service could never be supplied.

Let's assume that there is an operator offering transportation between city A and city B and that there is a regulatory constraint on the quality of vehicles that may be used. This will have an impact on its production costs. These costs could be recovered, in part, by increasing its prices. Such a price increase will have an influence on the demand which, logically, should then decrease. As long as the operator is making a zero or positive economic profit, it will remain on the market. If abiding by the obligations will lead to a negative economic profit, the operator will exit the market. This risk exists for any regulation and is not specific to PSO. Assume now that the operator, if it wants to offer a transportation between city A and B, has to abide by a set of obligations regarding not only the quality of the vehicle but also some specific obligations regarding the frequency of the service it is offering. Adding obligations will simply increase the production costs and lower the profitability of the activity and thus push the operator to exit the market. If, on top of that, a regulation imposes constraints on the pricing policy such that all customers would pay a price well below the costs of supplying the service, the operator will of course exit the market. Forcing it to remain on the market would lead to bankruptcy. Of course, the harsher the pricing constraints are, the higher the risk of exiting the market will be. Clearly, if a certain service can only be provided for free or at a price well below the costs of production, reasons for providing such a service are lacking.

In the case in which no operators were previously supplying a certain service on the market, adding PSO without any form of compensation would not change the situation: the service will still not be provided and it would be impossible to find operators willing to subject themselves to these obligations.

It is required to note that, regarding that risk, it is the combination of obligation and constraints on the pricing policy that will determine the number of suppliers.

- By lowering obligations regarding the quality of the service or lowering the constraints on the pricing policy, an operator could find it relevant to provide the regulated service.
- 2. The second risk is that imposing PSO on certain operators but not on others could create a competitive disadvantage which could have an impact on the efficiency of the PSO, but also on the sustainability of the provision of the service (and ultimately on its legality, see, infra). Let's take the case of an electricity supplier. Assume that this supplier is obligated to supply on demand which includes the costs of building the necessary infrastructure required for doing so. This obligation is coupled with pricing constraints such that the operator cannot recover more than 50% of the costs incurred to supply a specific customer. It is clear, in such a situation, that this supplier will not enjoy building such infrastructure because whenever it is doing so, it is losing money. Furthermore, if the PSO is fully enforced, it will not have any choice but to comply (if it does not comply, then the quality offered will be lowered for high cost customers). Of course, it would be possible to consider that it could charge a higher electricity price in order to recover for the costs incurred by the PSO; such a model would be possible if there is only one supplier on the market. If, however, there are few electricity suppliers, the supplier subjected to PSO suffers a competitive disadvantage. Crosssubsidization will not be possible and, most probably, the profitability for the supplier subjected to PSO will be lower than the profitability of other suppliers. If we are assuming perfect competition in electricity supply, it is most likely that the supplier subjected to PSO will have an incentive to exit the market, especially if it is operating in more than one market. More importantly, the PSO will mess with price signals such that consumers will not necessarily be supplied by the most efficient supplier. If a compensation is set such that it is equal to the profitability cost of the PSO, price signals will not be distorted, and no supplier will suffer from an undue competitive disadvantage. In other words, compensation, in that situation, is a condition to ensure "fair" competition. It is not an "exception" to competition law. The need to compensate is not for the service to be provided, but more normatively, for the service to be provided efficiently (which could justify that only certain operators will be subjected to PSO).
- 3. The third risk, like the first one, is more positive than normative. Regulators and legislator face legal constraints whenever they regulate and imposing without compensating could be considered as unconstitutional, incompatible with European law or international law, or incompatible with some law if administrative regulations are considered.

If the PSO is only targeting one operator and is not compensated, it could be considered as incompatible with the principle of equal treatment.

According to settled case-law, the general principle of equal treatment and non-discrimination requires that comparable situations are not treated differently unless differentiation is objectively justified.<sup>21</sup>

Imposing a burden (PSO) on certain operators but not on other is certainly incompatible with this principle. In such a situation, compensation is not only an option, but almost mandatory for saving the legality of the PSO! This point is clearly stated by the European Council:

pursuant to Article 5 of the Council Decision of 13 May 1965 on the harmonisation of certain provisions affecting competition in transport by rail, road and inland waterway, any decision by the competent authorities to maintain any public service obligation defined in this Regulation entails an obligation to pay compensation in respect of any financial burdens which may thereby devolve on transport undertakings.<sup>22</sup>

In the third Postal Directive (2008/6/EC), the idea that "unfair financial burden" of universal service obligations (a type of PSO) should be subject to compensation. Nevertheless, what should be considered as "unfair" is not defined.

Even if equal treatment is respected, imposing PSOs on all operators might not necessarily be compatible with constitutional, European or international law if they are not compensated for. The PSO could be considered, for example, as incompatible with the freedom of enterprise or freedom of trade and industry. Especially since it includes constraints on the pricing policy of operators or forces them to supply services at a price below their costs. For example, if lawyers in Europe were required to provide free representation for the poor, it is not certain that such a provision will be considered as compatible with European or constitutional law. It would be the same if court ordered counsel could be chosen arbitrarily by a jurisdiction and then not paid for their services. If an obligation does not have to be compensated, this obligation, even if enacted for the public interest, is not really a PSO in the framework developed here. If the imposition of a price regulation does not lead to some compensation, this price regulation, even if associated with obligations regarding the quality of the service, is also not a PSO. It is at this level that the distinction between PSO and obligation gets more complex. Indeed, when the compensation is not a monetary compensation or the result of a financial regulation, but is associated with a reserved sector or some specific rights, some obligations could be considered as compensated by some legal feature of the market on which an operator operates. In France, the fact that lawyers benefit from a monopoly for part of their activities could be considered as already compensating some future new obligations associated with their services.

It thus appears that compensation(s) is just a way to mitigate these risks. It would appear that compensation(s) is often not optional considering the nature of PSO. In light of the economic and legal system in which the obligation is imposed, it is in fact a requirement. In other words, and under the framework developed in this section, the existence of compensation is definitional of what a PSO is. As such, a public

<sup>&</sup>lt;sup>21</sup>Case T-58/05 (2007), para. 75.

<sup>&</sup>lt;sup>22</sup>Regulation (EEC) No. 1191/69.

service is a strategy of regulation combining obligations regarding the quality of the service or the way it is supplied, some constraints regarding the pricing policy of the operator and a compensation. These three attributes are cumulative and should be addressed in a sequence when a regulation is designed. Indeed, the quality imposed, and the price constraints, will have an incidence on the compensation required. Not taking into account the links between these three elements is a sure path for inefficiencies.

## 3 Reconsidering the Efficiency of Public Service as a Type of Regulation

In the previous section, public service as a regulatory strategy was defined. In this framework, the distinction between a regulatory state and a welfare state is purely artificial; after all, and following a very positivistic approach, the only thing that a state can do is to enact and implement rules. The definition offered also has the advantage of not introducing any subjective consideration like "public interest", for which no legal definition can be found. This does not mean that such a consideration is not relevant. But it is not directly relevant for the purpose of defining the strategy (since a strategy only concentrates on the means and not the end). It is important to determine whether or not this strategy is a relevant one and also an efficient one. It also disregards the distinction between economic and non-economic services even if this distinction could also play a role in the reconceptualization (infra, Sect. 3.2) to concentrate on "public services" whatever their form or justification. Moreover, it offers a way to read positive law in a different way while still remaining compatible with it.

This exercise in conceptual exploration is not merely theoretical and abstract; It also has practical implications. Because it analyses regulation and public services under the same framework (since public services are a type of regulation), it forces us to reconsider the efficiency of that regulatory strategy (Sect. 3.1). Furthermore, it could also offer insights regarding the reach of public services (Sect. 3.2).

## 3.1 Inquiring Into the Relative Efficiency of Setting Obligation and Compensating for Them vs Other Modes of Regulation

To assess the efficiency of a regulation, it is, in general, required to analyze it according to at least three criteria. The first, and probably one of the main criteria, is of course the cost-effectiveness of the strategy: Does the strategy attain the target at the lowest cost? This cost-effectiveness could then be broken down to consider information requirement—and their costs—for designing the regulation, designing

costs, monitoring costs and enforcement costs. It is also possible to inquire into the costs of use under uncertainty: assuming that the information is not perfect, would it be better to use this or that strategy. The second criterion targets the flexibility of the regulation: is it possible to adapt it as conditions changes or as new information arises? The third considers the dynamic impact of the regulation: will it have an influence on innovation? Will it create incentive to improve the service or the production process of that service? To these three main criteria, it would be possible to add consideration regarding equity (the implication of the strategy regarding the distribution of income or wealth) and potential ancillary benefits (which are going beyond the purpose of the regulation). Of course, these criteria could be used to assess the relative efficiency of the strategy "public service" compared to other regulatory strategies.

Here the aim is to enquire into the practical consequence of the reconceptualization by offering a structured assessment of the relative efficiency of the public service strategy. Moreover, this reconceptualization makes it clear that the nature of the operator (or of the undertaking to follow EU law) subjected to PSO is irrelevant: the purpose of this regulatory strategy is merely to achieve something. In this paper, I will limit my development to few examples in order to show the relevance of analyzing public service and other types of regulation under the same framework.

Regarding the cost effectiveness of the strategy "public service", it is clear that this strategy is *a priori* costlier (from the point of view of public finances) than a strategy setting the same obligations but without compensation. Three consequences could be derived from that statement.

First, it is not required to use the "public service strategy" whenever a service is already provided "satisfactorily" on a market. Like any other regulation, it is useful if and only if the regulation "improves" things and, in this hypothetical situation, there is nothing that needs to be improved. This consequence follows the position of the Commission regarding PSO:

it would not be appropriate to attach specific PSOs to an activity which is already provided [...] satisfactorily and under conditions, such as price, objective quality characteristics, continuity, and access to the service, consistent with the public interest, as defined by the state, by undertakings operating under normal market conditions<sup>23</sup>

Second, if it is possible to improve things, because, for example, the quality of the service (e.g. its safety) is not considered as sufficient, then, and since it is targeting all operators, it is probably not required to use a "public service" type of regulation. After all, and as the Commission states:

it would not be appropriate to attach specific PSOs to an activity which [...] can be provided satisfactorily and under conditions, such as price, objective quality characteristics, continuity, and access to the service, consistent with the public interest, as defined by the state, by undertakings operating under normal market conditions.<sup>24</sup>

<sup>&</sup>lt;sup>23</sup>Commission OJ 2012, C8/02 (2012), paras. 48–50.

<sup>&</sup>lt;sup>24</sup>Commission OJ 2012, C8/02 (2012), paras. 48–50.