

## Regulation & Incentives

Course title – Intitulé du cours	Regulation & Incentives
Level / Semester – Niveau / semestre	M2 – S2
School – Composante	Ecole d'Economie de Toulouse
Teacher – Enseignant responsable	Emmanuelle Auriol
Other teacher(s) – Autre(s) enseignant(s)	Andrew Rhodes
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Lecture Hours – Volume Horaire CM	
TA Hours – Volume horaire TD	
TP Hours – Volume horaire TP	30h
Course Language – Langue du cours	English
TA and/or TP Language – Langue des TD et/ou TP	

### Teaching staff contacts – Coordonnées de l'équipe pédagogique :

Emmanuelle Auriol, office T353, meeting by appointment only, preferred means of interaction email: [emmanuelle.auriol@tse-fr.eu](mailto:emmanuelle.auriol@tse-fr.eu)

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### Course Objectives – Objectifs du cours :

The prominent form of government intervention in markets is no longer public ownership of production. Instead, modern forms of regulation attempt to correct market failures. The latter are diverse, and so are the possible types of public intervention. The course aims to provide a primer in the theory of regulation of industries and its applications. The first part (Core Issues) provides the basic theoretical elements of economic regulation of industries. The second part then considers some more specialised topics.

### Prerequisites – Pré requis :

Although the course will not use difficult mathematics, some familiarity with basic Industrial Organization, Incentives Theory and Game Theory will be helpful.

### **Practical information about the sessions – Modalités pratiques de gestion du cours :**

The class is structured around slide presentations, which are made available to students on Moodle. We will go through them during the class. We encourage students to ask questions and make comments during the class so that learning is dynamic and interactive. Such configuration is conducive of rich interactions. We typically ask students to read book chapters or papers ahead of the class. Since the class lasts for 3 hours, there is a break after 1h30 for 15mn so that we can all take a rest before refocusing again on the class material.

### **Grading system – Modalités d'évaluation :**

There will be an exam and/or students will have to work in small groups on a project related to topics studied in class. They will have to read the literature on the chosen topics and structure it to make an analytical survey. More details will be provided during the first session.

### **Bibliography/references – Bibliographie/références :**

- Emmanuelle Auriol, Claude Crampe and Antonio Estache "Regulating Public Services: Bridging the Gap between Theory and practice", 2021 Cambridge University Press.
- Jean-Jacques Laffont and Jean Tirole "A Theory of Incentives in Procurement and Regulation"
- Jean Tirole "Industrial Organization"
- Selected additional readings, to be provided during lectures.

### **Session planning – Planification des séances**

#### **Part 1: Core Issues (Auriol)**

**Lecture 1: "Government intervention in market economies"** In this introductory lecture we will review the role of government in market economies. From core (i.e., Regalian) missions to economic interventions we will browse over the different justifications of public intervention. We will spend more time on the topic of market imperfections. We will review in detail the natural monopoly cases, which basically correspond to network industries, and the economic distortions the monopoly power yields. These distortions are at core of the rationale for economic regulation.

**Lecture 2: "Basic elements of regulation theory. Part 1: Baron-Myerson (1982)"** In this lecture we will cover the first basic model of regulation, namely the model by Baron and Myerson (1982). This basic model focuses on adverse selection issues. We will review the problem of the fiscal burden of financing public services (i.e., opportunity cost of public funds). We will also go through the revelation principle to understand the cost imposed by asymmetric information on public authorities.

**Lecture 3: "Basic elements of regulation theory. Part 2: Laffont and Tirole (1986)"** In this lecture we will cover the second basic model of regulation, namely the model by Laffont and Tirole (1986). This model introduces moral hazard issues into the regulation framework. Following Laffont and Tirole (1993) and Laffont and Tirole (2000), we will present the conceptual issues of performance-based

regulation: the basic trade-off between incentives and rent extraction. Further the students will recall their knowledge on Ramsey pricing to compare with Price Cap rule.

## **Part 2: Recent Evolution in Regulation (Auriol)**

**Lecture 4: "Deregulation"** Since the mid of the eighties there has been a worldwide wave of deregulation, starting in the UK under the impulsion of Margaret Thatcher, and also in the US with the historical demise of the ATT monopoly. In this lecture we will review the different economic arguments that help to understand why such deregulation reforms occurred on a global scale. We will go through sampling effects and yardstick competition effects. We will also talk about quality problems raised by deregulation.

**Lecture 5: "Public Private Partnerships and Outsourcing"** In this lecture we will study the optimal frontier between producing a commodity or a service directly under public management, or by contracting it out to the private sector. The costs and benefits of Public Private Partnerships and of outsourcing will be analysed in the light of the financial crisis that government are facing today. Since they cannot increase their debts and are not willing to further raise taxes, they need to find new sources of funds to finance investment in infrastructure. Relying on PPPs is often a solution that they favour because it takes out of the public account the burden of new investments.

## **Part 3: Topics in Regulation (Rhodes)**

Depending on time and interest, we will aim to cover the following topics.

### **Topic A: "Non-linear pricing and price discrimination"**

Firms in many (regulated) industries often use complicated pricing schedules, including non-linear and discriminatory prices. We will review the basics of price discrimination, and then examine how much freedom firms should have to choose their pricing structure. We will also use insights from behavioural industrial organisation to examine the impact of firms choosing complex tariffs.

### **Topic B: "Consumer data"**

Advances in computing power have enabled firms to collect vast amounts of data on consumers. Potential uses of these data are personalised pricing, advertising, and even product customisation. Linking up with Topic A, we will review some possible (unintended) consequences of regulation such as GDPR. We will also examine some broader issues, such as the regulatory challenges posed by data-driven algorithmic pricing.

### **Topic C: "Market power in (de)regulated industries"**

Regulators may often wish to screen industries for abuses of market power, before potentially launching more in-depth investigations. We will review the theoretical validity of using simple screens such as the level and (naively-computed) change in the Herfindahl-Hirschman Index. We will also discuss more advanced topics in merger policy, including optimal responses to successive mergers (dynamic merger review) and issues surrounding quality.

**Topic D: “Regulation of multiproduct industries”**

Many firms offer multiple products, and sometimes choose to either sell some products below cost (loss-leader pricing) or bundle some products together. We will review the implications of these two practices for market competition, and discuss whether regulation may be needed against them to avoid smaller firms and new entrants being harmed.

**Distance or in class learning – Enseignement à distance ou en présentiel :**

The class is designed to be taught both remotely through zoom or in a classroom. We will share the slides on Moodle and go through them during the class, either by sharing the screen or by projecting them in the class, depending on the configuration. We are confident that the exceptional circumstances we find ourselves will not prevent us from doing as much as the previous years, maybe more as we have more time to study.