Competition Policy

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Contents

Chapter 1

Prerequisites

No prerequisites required.

Chapter 2

Introduction

2.1 Team

In 2019-2020 this course is taught by:

- Santiago Bohorquez
- Jose Carreno Bustos
- Misja Mikkers
- Marius-Lucian Prisacuta
- Florian Sniekers
- Jierui Yang.

2.2 Datacamp

We are very happy that we partner with datacamp for this course to teach you both python and R.

Datacamp offers great on-line courses for you to learn R and python.

2.3 Important

Things to do if you want to follow this course:

- go to the Canvas page of this course.
- click on the link to get personal access to datacamp, and enroll with your *Tilburg University email address*
- go to the russet server at https://russet.uvt.nl

- log into the server and click on the green button “Start My Server”
- copy the address from the address field in your browser (you need to paste this in a webform)
- after you have done this, go to the webform: https://forms.gle/iZG5AaM3VpnBdGQa9
- and fill in this webform.
- note that you need to fill in the webform on or before *January 31*
- If you do not fill in the webform before the deadline, you cannot get a grade for this course. We use the webform also to plan the tutorials, so keep an eye on Canvas before your first tutorial

2.4 Questions

There are no stupid questions, it’s stupid not to ask questions. We encourage you to post your questions in the discussion section on Canvas.

Only when you need to include privately sensitive information (“my cat has passed away”), you can send an email. Always provide us with the following information: - say whether you are an ECO or EBE student - mention the group number of your tutorial and/or the name of your tutorial teacher - explain your question

Chapter 3

Schedule

3.1 Lecture 1 Introduction 30-01 (MM/CF)

3.1.1 In class:

organization of the course rules of the game basics Markdown basics python basics R To prepare before class:

Install Anaconda, R and R studio and bring your laptop 3.2 Lecture 2 Competition law and its objectives 01-02 (MM) In class:

classroom experiment competition presentation about the role of competition and regulation

3.1.2 To prepare before class:

Motta, Chapter 1. European Commission (2014). The European Union explained: Competition. Making markets work better. (http://ec.europa.eu/competition/publications/) 3.3 Lecture 3 Market definition and the measurement of competition and market power 06-02 (MA/RC) In class:

3.2 Estimation of market power

3.2.1 In class

guest lecture by Ramsis Croes (NZa/Erasmus Univeristy) demonstration of a logit demand estimation

3.2.2 To prepare before class:

Motta, Chapters 2 and 3. Gaynor: Paper will be uploaded to students

3.3 Lecture 4 Collusion and Horizontal Agreements 08-02 (MM)

3.3.1 In class:

classroom experiment with strategic interaction duopolies presentation about collusion

3.3.2 To prepare:

Motta, Chapter 4 (with the exception of 4.3)

3.4 Lecture 5 Continuation of Lecture 2, deterrence and cartels 13-02 (CF)

3.4.1 In class:

theory

3.4.2 To prepare before class:

Motta, Chapter 4 (with the exception of 4.3)

3.5 Lecture 6 Article 102 TFEU: Abuse of a dominant position 14-02 (MA/AB)

In class:

- lecture

To prepare before class:

- Motta, chapter 7

- European Commission: Guidance on enforcement priorities in applying Article 102 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, 2009

3.6 Lecture 7 Mergers 19-02 (MA)

In class:

- lecture
- guest lecture from ACM about merger assessment

To prepare before class :

- Motta, Chapter 5 (with the exception of 5.4) and chapter 6 (6.2.4, 6.4.2, 6.6) (EB)
- European Commission: Guidelines on the assessment of horizontal mergers, 2004
- European Commission: Guidelines on the assessment of non-horizontal mergers, 2008

3.7 Lecture 8 Leniency schemes and bid rigging 21-02 (CF)

In class

- Lecture

Prepare before class:

- https://www.researchgate.net/publication/300700468_Exploitation_and_Induced_Tacit_Collusion_A_Classroom_Experiment_of_Corporate_Leniency_Programs
- Bigoni, M., Fridolfson, S., Le Coq, C. and G. Spagnolo (2012). Fines, leniency and rewards in antitrust. The Rand Journal of Economics 43 (2), 368-390.
- McAfee, R. P., & McMillan, J. (1992). Auctions and Bidding Rings. American Economic Review, 82(3), 579-599.

3.8 Lecture 9 Horizontal mergers - part 2 04-03 (MA)

In class:

- Lecture

To prepare before class:

- Farrell, J., & Shapiro, C. (1990). Horizontal mergers: an equilibrium analysis. The American Economic Review, 80 (1), 107-126
- Federico, G., Langus, G. and T. Valletti (2017). Horizontal mergers and product innovation: an economic framework. UPF Working paper 2017-1579. Available at
- Ivaldi & F. Verboven (2005): Quantifying the effects from horizontal mergers in European competition policy to download

3.9 Lecture 10 Price regulation 06-03 (MM/BP)

In class

- Presentation about the theory of regulation
- Presentation from Bas Postema (ACM) about the regulation of the Dutch electricity networks

To prepare

- P. Agrell and P. Bogetoft (2004) Evolutionary Regulation: From CPI-X towards Contestability download
- ACM (2017) Incentive regulation of the gas and electricity networks in the Netherlands download

3.10 Lecture 11 Benchmarking 11-03 (MM/VS)

In class

- Presentation from Victoria Shestalova (NZa) about DEA
- DEA in R

To prepare:

- P. Agrell and P. Bogetoft (2002), DEA-Based incentive regimes in health care provision to download
- A. Arcos-Vargas, F. Núñez-Hernández, Gabriel Villa-Caro, (2017), A DEA analysis of electricity distribution in Spain: An industrial policy recommendation, Energy Policy 102 (583 - 592)

3.11 Lecture 12 Vertical integration 13-03 (MM/KK)

In class:

- classroom experiment vertical mergers
- presentation about vertical mergers and vertical restraints by Katalin Katona (NZa/Tilburg University)

To prepare before class:

- Motta, Chapter 6 (with the exception of the two starred (**) sections)

3.12 Lecture 13 Abuse of a dominant position: predatory pricing 18-03 (MA/MM)

In class:

- classroom experiment
- lecture

To prepare before class:

- Goolsbee, A., Syverson, C. (2008). How do incumbents respond to the threat of entry? Evidence from the major airline. The Quartely Journal of Economics, Vol. 123, Issue 4, 1611-1633 https://academic.oup.com/qje/article/123/4/1611/1933206
- Nurski, L., Verboven. F. (2016). Exclusive Dealing as a Barrier to Entry? Evidence from Automobiles. The review of economic studies, Vol 83, Issue 3, 1156-1188., https://academic.oup.com/restud/article/83/3/1156/2461273

3.13 Problems

The idea with these lectures is that students in teams will present solutions to policy makers for some competition and regulation problems. The students will present the case in class to the government.

the presentation (20 mins) should:

- describe the problem
- discuss the relevant academic literature
- present policy options (including pro's and cons from an economic perspective)

3.14 Lecture 14 Transparancy of prices in the hospital market 20-03 (MM)

- Teams A, B, C, D

3.15 Lecture 15 Competition problem number 2 25-03 (MA)

- teams E, F, G, H

3.16 Lecture 16 Regulation problem 27-03 (MM)

- teams I, J, K, L

3.17 Cases

In the cases students will form new teams. Some teams will represent the government (Comptetition Authority or Regulator), the other teams will represent the firms. We will provide some data, so the teams can also do a quantative analysis.

The students not assigned to a team will form the jury and will have to formulate a verdict.

3.18 Lecture 17 Competition case 01-04 (MA)

a. Competition Authority: teams 1 and 2
b. Firms: teams 3 and 4

3.19 Lecture 18 Regulation case 03-04 (MM)

Note: Nursing homes

a. Regulator: teams 5 and 6

b.

Chapter 4

Firms: teams 7 and 8

> Finally, we urge you to use google (or other search engines like DuckDuckGo) and stackoverflow with your assignments. Some students find this weird at the beginning: should we not teach you everything that you need to know? The answer is no for a number of reasons. First, even professional programmers use google and stackoverflow all the time. If you are on Quora; see this post and this one. Second, python and R are open source and lots of people work with it. If you encounter a problem, chances are that someone else had the same problem and knows the solution to it. There is not need to "invent the wheel". Use the resources available to you. If you copy a lot of code, you should add a reference. Finally, because python and R are open source, they develop rapidly. The things that we teach you now, will be obsolete in a couple of years time. Hence, you need to be able to find your way around also in 10 years time. To start practicing this, use google now. >>>>>>> 54edd162eaf857e745bc2b1bfdd68064d89af608

The only warning here is: at the exam you will not have access to the whole internet. So, also make sure that you can find help in the jupyter notebook. We will practice this in class.

Chapter 5

Important

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Chapter 6

Information first Lecture

6.1 Introduction Programming

Misja Mikkers & Florian Sniekers

6.2 Table of Contents

- Introduction
- markdown
- Second part: how to make sure you get the course material and a grade for this course

6.3 Introduction

- Don't panic
- this is a programming course
- we know that many of you are not too keen on computers (beyond MS Office)
- this will be a gentle introduction to open source software
- it will not become too sophisticated
- it is meant for everyone to understand
- especially, if you never did any programming before
- Why this course?
- mainly to teach you to use your computer better
- to be able to use open source ("free") software
- to solve problems together with readable documentation on how you solved it ("reproducible research")

- on this last point, office products like excel score rather badly
- you will use R and python in courses in the years to come

6.3.1 Who teaches this course?

In 2019-2020 this course is taught by:

- Santiago Bohorquez
- Jose Carreno Bustos
- Misja Mikkers
- Marius-Lucian Prisacuta
- Florian Sniekers
- Jierui Yang.

6.3.2 How do we teach this course?

- online lectures on Datacamp
- tutorials: with plenty of time to ask questions
- there are a number of "regular" tutorials and one in the computer lab
- if you do not have a laptop, attend the tutorial in the computer lab
- if you do have a laptop, attend your regular tutorial group
- no need to attend both!
- we may drop some tutorial groups, so check Canvas!
- schedule can be found in the chapter schedule on this website
- we can track your progress on datacamp
- assignment notebooks to be made *before the class*
- class notebooks that we do together *in class* (to allow you to ask questions)

6.3.3 Information about the course

- all information about the course can be found on this website
- pay attention to: -the schedule: explaining when you need to do what -the rules for the exam explaining how the exam works and a practice exam
- Your grade -There are two separate ways to earn your grade
- regular route: -midterm on python -end of semester exam on R
- resit -exam on python and R combined -you cannot use grades from one route for the other one.

6.3.4 Exam

- for more information see the exam chapter
- check the instructions for the exam
- do not open your exam file after you have finished
- if you do, your exam will not be graded (even if you did not change anything)
- at the exam you can freely copy and paste from the assignments we did in class
- we will not post answers to the assignments
- make sure you attend the tutorials and pay attention in class!

6.3.5 Datacamp

- you need to sign up for Datacamp!
- for details see the chapter Important
- note the deadline for filling in the webform!
- if you miss the deadline, you may have to pay for premium content on Datacamp yourself

6.3.6 markdown

- syntax
- markdown allows you to create structure in a simple way
- examples are: `# this is a heading`

  `## subheading`

  `* first bullet * second bullet`

  `[link text](actual link, e.g. http://www.etc)`

  `![Alt text for image](/path/to/img.jpg "Optional title")`
- look on the web for other syntax like footnotes etc.
- equations you can type in latex
- latex is great word processing software for now, we only need it to write math you can guess what the following will do:

```
$x^2$, $\beta$, $\sqrt{9}$, $\frac{1}{2}$, $\bar x$

\begin{equation}

a^2 + b^2 = c^2

\end{equation}
```

- if you need something, just google; e.g. “google latex phi” or “google latex empty set” etc.
- and try it out in the jupyter notebook

6.4 Second part of lecture: making sure you get the course material and a grade for this course

- go to the server and start a jupyter notebook
- link to the server address to copy/paste in the google form
- importing the course material, see chapter Schedule (this is also the way you will import your exam)
- evaluating cells
- you can choose python/R kernel
- getting help: ? and TAB
- code vs. markdown cell
- type some latex

6.4.1 before you leave

do the steps under the chapter Important

Chapter 7

Exam

7.1 Grade

Your grade is either determined by:

- the midterm exam which is python only (50%)
- the exam will be R only (50%)

or by

the resit which is based on both python and R (100%)

Each exam lasts 3 hours. You cannot combine the resit with the midterm etc.

7.2 Useful to know

The questions that we ask in the exam are based on the notebooks that we discuss in class. Hence make sure that you have these ready before the exam. You are allowed to use copy-paste out of these notebooks.

During the semester, you can use google to find information on functions, error messages etc. However, during the exam you can only access a limited number of pages.

In particular, during the exam you work in a special exam environment on TiU computers. We have asked IT to whitelist the following websites:

- the russet server (where you will do your exam)
- gitlab (where you will import your exam from)

- Canvas (where we will give you the command to import the exam)
- stackoverflow
- python.org
- numpy
- scipy
- pandas
- datacamp
- cookbook
- tidyverse.org
- rpubs
- rstudio
- r4ds
- rdocumentation

7.3 Exam procedure

- we will post the exam both on gitlab. You will get instructions how to get the exam on the Russet server.
- finishing your exam
  - make sure that we can easily see which notebook is your exam
  - that is, do not rename the exam notebook (so that we do not know which notebook it is)
  - do not have 5 different versions of the exam notebook; we will then choose one at random and grade this one
  - after you finish the exam, do not re-open the notebook again: we can see the last time the notebook was opened. If this is after you left the exam room, we can see this and will nullify your exam.