

## **Syllabus**

### **Public Economics (3 ESTC)**

<https://www.coursera.org/learn/public-economics>

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#### **Course Description**

**Pre-requisites:** Elementary Mathematics; Economics or Microeconomics (Introductory level) – not obligatory, but helpful

**Course Type:** compulsory

#### **Abstract:**

The central theme of the course is the role of government as a mechanism of resource allocation which complements and augments markets. Governments are viewed as public agencies set to correct market failures. Such agencies however are prone to failures of their own, and hence markets and governments are two imperfect alternatives. We deal with government's limitations, with particular emphasis on those that have to do with informational asymmetry, limited administrative capacity, and imperfect accountability to society. Otherwise the course's main themes are economics of taxation, regulation, politics of public economics, incentives in government, and government vis-à-vis (civil) society.

#### **Learning Objectives**

The main aim of the course is to develop analytical tools and their application to key policy issues relating to the spending, taxation and financial activities of the government. The program includes both traditional issues for such courses - taxes, public goods, state regulation, as well as more modern topics, including agency relations between society and the state, prerequisites for efficiency and possible pathologies of the state, as well as incentives in the public sector.

#### **Learning Outcomes**

As a result of studying the course, students will better understand the tasks of the state in the economy, the tools used to solve these problems, as well as informational, organizational and political restrictions on the activities of the state.

**Course Plan:** the course is studied on-line on the platform Coursera. It lasts one module and consists of 6 lectures on-line, 1 seminar off-line and final exam.

**Course Content:**

Introduction

**1. Government in a Market Economy** (5 videos (89 min), Self-study Material (10 min), Problem Set 1 (20 min))

[1.1. Markets and governments](#) 12 min

[1.2. Market failures and the Coase theorem](#) 24 min

[1.3. Collective action problem](#) 21 min

1.4. Correcting externalities 14 min

1.5. Socially productive and unproductive activities 15 min

Lecture: In this lecture we discuss reasons calling for government presence in market economies. We stress key advantages of markets over governments which make privately taken decisions highly efficient in the absence of externalities. The latter significantly distorts the work of market mechanism and lead to inefficient outcomes. We consider possible solutions to this inefficiency which are based either on coasean agreements or on public coercion (governments) and discuss conditions, advantages, and disadvantages related to these solutions.

**2. Design of Government: A Tax Theory Primer** (7 videos (100 min), Self-study Material (10 min), Problem Set 2 (20 min))

[2.1. Government Design](#) 14 min

[2.2. Power and Limitations of Lump-Sum](#) 30 min

[2.3. Selecting Tax Schedule](#) 8 min

2.4. Complexity vs. Simplicity 12 min

2.5. The Role of Elasticity 22 min

2.6. Political Constraints 4 min

2.7. Protection from Leviathan 6 min

This lecture covers the positive and normative theories of taxation, ways and means to collect public revenues, and existing informational, administrative, political constraints governments have to deal with. We consider lump sum tax as first best option which implementation in practice, unfortunately, is severely restricted by informational asymmetry. Then follows a cursory introduction into one of the most beautiful (but also most technically complex) parts of public economics which characterizes optimal tax schedules minimizing welfare losses subject to information constraints; such analysis is carried out in the so-called Mirrlees economy. Another focal point of the lecture is the role of elasticity in selecting taxes and how the concept of elasticity can be applied to the analysis of time inconsistency in taxation.

**3. Scope of Government (5 videos (96 min), Self-study Material (10 min), Problem Set 3 (20 min))**

[3.1. Scope of Government: Objectives and Restrictions](#) 5 min

[3.2. Controlling Externalities: Litigation vs. Regulation](#) 23 min

[3.3. The Role of Administrative Capacity](#) 16 min

3.4. Outsourcing of Public Services 31 min

3.5. Regulatory Capture 19 min

In this lecture we discuss how governments perform their key functions such as public regulation and public service delivery using three cases. In the first case, we discuss alternative means to control externalities by considering situations when private firms could cause harm to third parties (employees, customers, local communities etc.). These means include (a) imposing mandatory requirements upon firms to take precautionary measures, (b) allowing damaged parties to sue firms in the court of law, and (c) leaving such incidents to Coase-style private solutions. In the second case, we compare two modalities of public service delivery, namely in-house, by government agencies, or through outsourcing to private sector firms. Finally, we discuss the phenomenon of regulatory capture when wealthy elites unnecessarily complicate and obstruct the entry into the formal sector.

**4. Politics of Public Economics (6 videos (95 min), Self-study Material (10 min), Problem Set 4 (20 min))**

[4.1. Fiscal policies in democracies and autocracies](#) 13 min

- [4.2. "Invisible political hand"](#) 9 min
- [4.3. Democracy and autocracy compared](#) 15 min
- 4.4. Preference aggregation problem 12 min
- 4.5. Single-peaked preferences and majority rule 23 min
- 4.6. Public goods: jointly or separately? 19 min

This lecture begins with an analysis of how public economic policies differ from each other in democracies and autocracies. We next turn to politics of public economics in democracies and begin with the classical result about non-existence of a universal rule of democratic aggregation of preferences (Arrow's impossibility theorem). Then introduce so-called single-peaked preferences and discuss the role of median voter in collective decision making. Another problem occurs in polarized societies where even economically optimal democratic choice leaves people far to the left and/or far to the right from the median quite unhappy with a majority will. Possible solutions include restricting democratic procedures to smaller and hopefully more homogenous groups and charging user fees for a public good. We discuss the costs and benefits of these two approaches.

**5. Working of the Government** (5 videos (81 min), Self-study Material (10 min), Problem Set 5 (20 min))

- [5.1. External agency: accountability ex post](#) 15 min
- [5.2. External agency: accountability ex ante](#) 15 min
- [5.3. Internal agency: limits to bureaucratic efficiency](#) 20 min
- 5.4 Career concerns 16 min
- 5.5. Economics of corruption primer 13 min

In this lecture we discuss external and internal agency problems, i.e. relations between government (as an agent) and society (the principal) and between rank-and-file bureaucrats (the agents) and their bosses (the principals). We discuss ex ante and ex post accountability system in an external agency. Moving to the internal agency problem, we discuss how to create performance incentives within the bureaucracy including vertical monitoring and career concerns. The final episode of the lecture deals with selected topics of the economics of corruption.

**6. Government and Society** (5 videos (78 min), Self-study Material (10 min), Problem Set 6 (20 min))

[6.1. Government and Social Capital: Substitutes or Complements](#) 9 min

[6.2. Understanding Philanthropy](#) 9 min

[6.3. Role of Civic Culture](#) 31 min

6.4. Let's Do It Ourselves? 15 min

6.5. Social Capital and Size of Government 12 min

In this final lecture of the course we discuss the role of society in public sector economics. We start with the notion of social capital and show its duality: its substitutional and complementary relations to government. Our first illustration of the interplay between government and social capital is philanthropy. Then we demonstrate how dual role of social capital gives rise to the so-called “paradox of social capital”. Then we illustrate the salience of civic culture for good public sector governance by models linking government performance to what citizens expect from their governments. In the next part of the lecture, we show how communities can respond to a lack of government-supplied public goods and services by apolitical self-organization in order to substitute for what they haven’t received from the government. The final episode of the lecture explores the link between social capital and the size of government (public sector).

**Reading List**

**Required:**

1. Hindriks, J. and G.D. Myles Intermediate Public Economics, (2nd ed.), Cambridge: MIT Press, 2013

**Optional:**

1. Nicholas Barr (2001). Welfare State As Piggy Bank: Information, Risk, Uncertainty, and the Role of the State. Oxford University Press.  
<http://site.ebrary.com/lib/hselibrary/reader.action?docID=10273047>
2. Connolly, S. and A. Munro, Economics of the Public Sector. Prentice Hall Europe, 1999
3. Julian Le Grand, Carol Propper, Sarah Smith (2009). The Economics of Social Problems. Palgrave Macmillan, 3rd edition. (Also available in Russian, 2013, HSE Publishing House).
4. Hillman A. L. Public Finance and Public Policy: Responsibilities and Limitations of Government. Cambridge: Cambridge University Press, 2009
5. Mueller, D.C. Public Choice III. Cambridge: Cambridge University Press, 2007 (Also available in Russian).

On Nash equilibrium:

- <https://www.khanacademy.org/economics-finance-domain/microeconomics/nash-equilibrium-tutorial>
- <http://www.youtube.com/watch?v=Ac2vCCuf8-s&list=PL6EF60E1027E1A10B&index=6>
- <http://www.economics.utoronto.ca/osborne/igt/nash.pdf>

On optimization:

- <https://www.economics.utoronto.ca/osborne/MathTutorial/NEN.HTM>

**Grading System** 30% for activities at the seminar (discussions), and 70% for final exam.

**Examination Type:** written exam with open questions (covers the whole course content), 2 academic hours.

Examples of questions for the final exam:

- 1) What determines the need for government influence on a market economy? What features of the state allow it to carry out actions inaccessible to other subjects of a market economy?
- 2) What properties do public goods have?
- 3) What is the principle of "second best"?
- 4) Why does the pursuit of rents lead to net losses for society?
- 5) Why can the interests of the bureaucracy determine the wasteful use of public sector resources?
- 6) What taxes are non-distorting and why?
- 7) Under what conditions is taxation optimal?

**Methods of Instruction** lectures on-line and 1 seminar off-line.