

**Программа учебной дисциплины**  
**Экономика государственного хозяйствования**  
**(Public Economics)**

**преподается на английском языке**

Утверждена  
Академическим советом ООП «Финансы»  
Протокол № 2 от «02» ноября 2016 г.

Автор	Леонид Иосифович Полищук
Число кредитов	2
Контактная работа (час.)	0
Самостоятельная работа (час.)	76
Курс	2
Формат изучения дисциплины	С использованием онлайн курса, <a href="https://www.coursera.org/learn/public-economics">https://www.coursera.org/learn/public-economics</a>

**I. ЦЕЛЬ, РЕЗУЛЬТАТЫ ОСВОЕНИЯ ДИСЦИПЛИНЫ И ПРЕРЕКВИЗИТЫ**

This course offers an introduction into the public economics theory. It does not aspire to cover theories of taxation, public expenditures, regulation etc. at length and in-depth. Rather, our ambition is to give a bird's-eye view of central themes of public economics and related disciplines, and teach concepts, logic, and ideas, rather than methods of analysis, which would require an entirely different course format. Our choice of topics covered by the course reflects a trade-off between salience and centrality, on the one hand, and suitability for a brief online introductory course, on the other. The course content is neither comprehensive (which would be a "mission impossible" for virtually any public economics course"), nor representative of other such courses. With these limitations and caveats in mind, we encourage our students to continue their public economics studies in a more regular fashion, and see our role inter alia in motivating interest in such "continued education". 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.

**II. СОДЕРЖАНИЕ УЧЕБНОЙ ДИСЦИПЛИНЫ**

**1.1. Government in a Market Economy**

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.

## **1.2. Design of Government: A Tax Theory Primer**

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.

## **1.3. Scope of Government**

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.

## **1.4. Politics of Public Economics**

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.

## **1.5. Working of the Government**

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.

## **1.6. Government and Society**

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).

### III. ОЦЕНИВАНИЕ

В текущем и итоговом контроле при выполнении тестовых заданий студент должен продемонстрировать знание основ экономики государственного хозяйствования и умение решать задачи с применением изученных инструментов.

Для успешного прохождения курса необходимо выполнить тестовые задания, не менее 80% для получения положительной оценки по курсу.

### IV. ПРИМЕРЫ ОЦЕНОЧНЫХ СРЕДСТВ

#### Оценочные средства для оценки качества освоения дисциплины в ходе текущего контроля

В процессе изучения дисциплины выполняют 6 тестов по итогам каждой из лекций, которые состоят из закрытых вопросов, предполагающих расчёты на основе экономических моделей или знание теоретических концепций.

После выполнения промежуточных контрольных тестов студент выполняет экзаменационный тест, состоящий из 12 открытых вопросов и задач.

#### Примеры заданий промежуточной аттестации

Оценочные средства находятся на сайте дисциплины на платформе COURSERA

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

Пример тестирования к лекции 6 представлен ниже.

##### 1. Вопрос 1

Which of the following statements are true? (could be any number of options)

Societies with higher stock of social capital have larger governments because such societies have greater trust in their politicians and public servants

Social capital reduces costs of dictatorship

Social capital reduces costs of disorder

Societies with higher stock of social capital have smaller governments, because such societies can prevent market failures at the grassroots

##### 2. Вопрос 2

Suppose that there is an agent with utility function  $U(x,G)=\ln\{x\}+\ln\{G\}$   $U(x,G)=\ln x+\ln G$ , where  $x$  is private consumption, and  $G$  is public good. Agent's wealth equals  $w>0$ . Government's funding of the public good is  $G_0$ . The agent can make an additional contribution  $g$  towards the public good provision, so that  $G=G_0+g$ , and keep the rest for her private consumption  $x=w-g$ .

Suppose that the agent's utility function now has a "warm glow" component  $U(x,G,g)=\ln x+\ln G+a\ln g$ : with some  $a>0$ . Assume  $a=1$ ,  $w=3$ ,  $G_0=3$ . What contribution to public good provision will be made by the agent? (Report single number up to three decimals)

##### 3. Вопрос 3

Which of the following statements are true? (could be any number of options)

Societies satisfied with their governments prefer greater government involvement and control in their lives

High level of trust in the society can be associated with big governments which operate welfare states

Societies which hold their governments to low esteem could still yearn for greater government involvement and control

When people don't trust each other, they usually don't trust their governments, too, but want stricter government regulation as a lesser of two evils

#### 4. Вопрос 4

Which of the following statements are true? (could be any number of options)

If every citizen is ready to defend his or her rights against government's abuse, the government will always stay within its constitutional limits and make no attempt to abuse its powers

Opportunistic government can always expropriate one part of society provided that it can "buy" political support from another part

If every citizen is ready to protest against government's abuse of power, the government will always stay within its constitutional limits and such abuse will not happen

Constitutional checks and balances will not be observed unless the society is vigilant to protect and enforce those

#### 5. Вопрос 5

Consider the model by Nannicini et al. (2013).

If a majority of population are uncivic ( $\alpha < \frac{1}{2}$ ), government's policies will not be socially optimal – true or false?

False

True

#### 6. Вопрос 6

Which of the following statements are true? (could be any number of options)

Mutual help, volunteering, and charitable donations make civic culture redundant

When there is almost no civic culture in the society, people's ability to help each other to cope with government negligence or abuse could be a valuable substitute to unavailable public goods and service

The capacity to cope at the grass-root with government predation and abuse could make the society worse-off

People's ability to pick up where governments left off weakens performance incentives for public servants

#### 7. Вопрос 7

Consider the model describing the impact of grassroots social capital and civic culture, and assume  $C_0(D)=D^2+D$ ,  $C_1(D)=DC_0(D)=D^2+D$ ,  $C_1(D)=D$ .

Calculate the amount of wealth extraction for the following social capital stocks:  $\alpha = 0.5$ ,  $\omega = 0.5$ .

### 8. Вопрос 8

Recall the Algan-Cahuc-Sanguiner model from the lecture.

Civic agent's preferred tax rate decreases in the probability of tax evasion – true or false? Uncivic agent's preferred tax rate decreases in the probability of tax evasion – true or false?

False, true

True, false

False, false

True, true

### Вопрос 9

#### 9. Вопрос 9

Consider an apartment building in which apartments are privately owned by tenants. Building infrastructure (hallways, outer walls, elevators, parking etc.) could be either collectively owned by the tenants (condominium) or owned and operated by municipal governments. In the case of condominiums tenants elect condominium councils and pay condominium fees to run the building. Which of the following statements are true?

When there is a lack of civic culture among tenants, municipal ownership and management could be preferable to condominiums

Running a condominium poses a collective action problem, and hence condominium success depends on tenants' social capital

If tenants know their neighbors and can help each other with small chores in everyday life, condominium's success is guaranteed

Condominiums are always more efficient than municipal ownership and management, because tenants have strong incentives to keep their buildings in good shape and better knowledge of how best to spend the available budget

#### 10. Вопрос 10

Recall the Glaeser-Shleifer model from Lecture 3, where there are two types of firms that could cause damage to the society (we use notations from that model). Suppose that each firm makes a profit  $\Pi > C$ , unless consumers boycott its products. Assume further that if a firm has caused damage to the society, share  $\beta$  of its customers, who are civic-minded, will boycott the firm's products, and the firm's profit will be reduced to  $(1-\beta)\Pi$ . The government can impose and enforce a regulation requiring all firms to take precautionary measures, as in the above-mentioned model. A firm can also use precautionary measures not required by government, in which case such firms demonstrates "corporate social responsibility". In what follows laissez-faire (which could possibly involve corporate social responsibility) and government regulation are considered as the only alternatives (e.g. we assume away lawsuits).

Which option - regulation or laissez-faire - will be preferable, if  $\beta \Pi(p_1 - p_2) < C < \alpha D(p_1 - p_2)$ ?

regulation

laissez-faire

**Пример итогового тестирования представлен ниже**

#### 1. Вопрос 1

Which of the following statements are true? (Choose any number of options)

Coordination could be achieved privately by mutual accord, but this is unlikely economy-wide with a very large number of participating agents

Governments are involved in provision of public goods, because by definition this is a public matter

The role of government is to enforce coordination in the economy when private incentives are not aligned with public interest

Markets never achieve Pareto-optimality – market outcomes are Nash equilibria which cannot be Pareto-optimal

## 2. Вопрос 2

Which of the following statements are true? (Choose any number of options)

Good governments supply institutions and implement policies that make rent-seeking less attractive than productive activities

Better protection of property rights by government leads to re-deployment of human resources from rent-seeking to productive activities, which increases the wealth of nation

Rent-seeking is about lobbying government; without government there won't be any rent-seeking

The best thing government can do to draw human resources from rent-seeking to productive activities is to invest in research and development so that new technologies make production more profitable

## 3. Вопрос 3

Which of the following statements are true? (Choose any number of options)

More elastic tax bases are preferable to less elastic, because taxpayers have greater flexibility in adjusting to taxation

Progressive taxes are those that contribute to social and economic progress

Suppose that a taxpayer has to pay a flat-rate income tax (where tax payment is a certain percentage of her income), and ends up paying \$1,000. If instead she were required to pay a \$1,000 lump-sum tax, she would have been better-off

Socially optimal tax rules which take into account informational constraints are hard to administer, and hence real-life tax rules are simplified

## 4. Вопрос 4

Suppose that there are  $N$  taxpayers, and each has 1 unit of time to split between work and leisure. Each taxpayer collects wage equal 1, so if she works time  $z$ , her (pre-tax) income equals  $z$ . Taxpayers have no other sources of income. Taxpayers pay income tax with flat rate  $t$ , and all tax revenues go towards the provision of a public good  $G$  (which is measured by the revenue spent on the public good). Taxpayers have identical utility functions  $U(x, l, G) = x l G$ , where  $x = (1-t)z$  is private consumption (post-tax income),  $l$  – leisure, and  $G$  – public good. Calculate the optimal tax rate. (Enter answer as proportion rounded up to one decimal using round half up rule)

## 5. Вопрос 5

Which of the following statements are true? (Choose any number of options)

If a public service is outsourced to a private firm, the owner of the firm would not be interested in innovations that would improve quality of the service at a slight increase of operation cost (hint: think about contract re-negotiation)

New tracking and monitoring technologies (radars, vehicle transponders, GPS) make outsourcing of public transit to private firms more appealing

Outsourcing of national defense to a private firm is not a good idea, because the contractor would have enormous bargaining power vis-à-vis the government

Privatization of schools requires caution, because such private schools will have the tendency to turn away students with learning problems

## 6. Вопрос 6

Consider the following version of the Glaeser-Shleifer model: there are two types of firms with shares resp.  $\alpha$  and  $1-\alpha$ ; firms' types are unknown to the government. Both firms could cause damage  $D$  to third parties with probabilities  $p_1$  for type 1 firms and  $p_2$  for type 2 firms. Firms could take precautionary measures at cost  $C$ , that would completely (with 100% certainty) prevent damage to third parties. Assume that the only available alternatives are regulation which would require all firms to take precautionary measures (and provide for hefty penalties to ensure full compliance), and laissez-faire. Further assume  $\alpha=0.2$ ,  $p_1=0.4$ ,  $p_2=0.1$ ,  $D=100$ ,  $C=20$ .

Assume now that the government knows firms' types, and can restrict regulation to a particular type, making the other type exempt. Calculate social gains brought about by such informational symmetry in comparison with the baseline case when firm types are unknown to the government (assume that the total number of firms equals 100). (Enter one number)

## 7. Вопрос 7

There are two jurisdictions with the same population  $N$ ; all individuals in both jurisdictions have the same wealth  $w$ . In the first jurisdiction residents have the utility function  $U_1(x, G) = x + a_1 \sqrt{G}$ , whereas in the second the utility function is  $U_2(x, G) = x + a_2 \sqrt{G}$ . Initially, in the status quo, both jurisdictions have their own lump-sum taxes  $\tau_1, \tau_2$  and separately fund their own public goods  $G_1, G_2$ ; assume that taxes and public goods are chosen optimally for every jurisdiction. The jurisdictions contemplate joint funding of the public good that would be available to residents of both jurisdictions. Which of the following statements are true? (Choose any number of options)

One can always find the same price per unit of the public good (which residents in both jurisdictions will have to pay) such that this price would ensure a balanced budget of public good provision and in each jurisdiction residents would be better-off than in the status quo

One can always find lump-sum taxes for each jurisdiction (same within each jurisdiction but possibly different between jurisdictions), such that if tax revenues from both jurisdictions are spent on a joint public good, then in each jurisdiction residents would be better-off than in the status quo

One can always find the same lump-sum tax for both jurisdictions such that if tax revenues from both jurisdictions are spent on a joint public good, then in each jurisdiction residents would be better-off than in the status quo.

## 8. Вопрос 8

Which of the conditions of the Arrow Impossibility Theorem could be violated by the majority rule?

Pareto efficiency

Independence of irrelevant alternatives



Non-dictatorship



Unrestricted domain



Rationality

### 9. Вопрос 9

Which of the following statements are true? (Choose any number of options)



Social welfare initially increases in elected officials' re-election threshold as long as this threshold remains below its optimal level, and then abruptly drops, once this optimal level is exceeded



Social welfare monotonically increases in elected officials' re-election threshold



Excessively high re-election thresholds prompt predatory behavior of elected officials



Social welfare monotonically decreases in elected officials' re-election threshold

### 10. Вопрос 10

Which of the following statements are true? (Choose any number of options)



Corrupt officials use red tape a screening device



One-stop shop cuts red tape and corruption burden on private sector



Corruption and red tape are unrelated government pathologies



One-stop shop reduces the gross bribery income of corrupt bureaucracy

### 11. Вопрос 11

Consider the the Weingast model in which the government contemplates an expropriation of two groups comprising the society; all numerical values are as specified in the lecture. Both groups are assumed to be risk-neutral, i.e. concerned about their expected gains or losses.

If it is known that the first group always acquiesces, what would be the optimal reaction of the second group – protest, acquiesce, mix protest and acquiescence with some probabilities between zero and one? (Enter probability of protest strategy, which is 11 in case of pure protest strategy, 00 in case of pure acquiesce strategy, and some two-decimal proportion in case of mixed strategy; use round half up rule for decimals rounding)

### 12. Вопрос 12

Which of the following statements are true? (Choose any number of options)



In the Nannicini et al.'s model, public good provision does not depend on the share of civic voters as long as such voters are a minority, and jumps up to the socially optimal level once civic voters gain majority



A voter is civic if she participates in elections and takes them seriously, basing her vote on her actual welfare, not on political rhetoric



A voter is civic if her support of government is conditional on social welfare



In the Nannicini et al. model, tax rate stays at its maximal possible level as long as civic voters are a minority, and drops to the socially optimal level once civic voters have a majority

## V.РЕСУРСЫ

### **Источники:**

Список источников представлен в материалах лекций:

<https://www.coursera.org/learn/public-economics/supplement/XgM8I/syllabus>

### **Программное обеспечение**

Не предусмотрено

### **Профессиональные базы данных, информационные справочные системы, интернет-ресурсы (электронные образовательные ресурсы)**

Не предусмотрено

### **Материально-техническое обеспечение дисциплины**

Для прохождения курса студент должен иметь доступ к следующим техническим средствам:

- компьютер / ноутбук с ПО Microsoft Office версии не ниже 2003 г.