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ОБЩЕСТВЕННЫЕ ФИНАНСЫ: РОССИЙСКИЙ И ЗАРУБЕЖНЫЙ ОПЫТ

Учебно-методическое пособие
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В настоящем пособии изложены учебно-методические материалы по курсу «Общественные финансы: российский и зарубежный опыт» для иностранных студентов, обучающихся в ННГУ по направлению подготовки 38.04.02 «Менеджмент» (магистратура).

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Table of Contents

I. PUBLIC SECTOR OF AN ECONOMY.....	5
1.1. Forms and Methods of Interaction between Private Sector and State	5
1.2. Market and State Failures.....	6
1.3. Functions of Public Finance.....	6
Questions and Problems # 1.....	8
Self-assessments # 1.....	10
II. PUBLIC CHOICE	13
2.1. Public Choice: Definition and Stages.....	13
2.2. A Man and a State.....	13
2.3. Modern Political Systems	14
Questions and Problems # 2.....	15
Self-assessments # 2.....	17
III. PUBLIC GOODS AND EXPENDITURES.....	18
3.1. Public Goods Characteristic.....	18
3.2. The Balance in the Production of Public Goods	18
3.3. Collective Action.....	20
3.4. Club Theory.....	21
3.5. Peculiarities of Expenditures Assignment.....	22
Questions and Problems # 3.....	23
Self-assessments # 3.....	30
IV. PUBLIC REVENUES	35
4.1. Sources of Government Revenue	35
4.2. Tax Classification	36
4.3. Criteria for Evaluation of Tax Systems	37
4.4. Peculiarities of Subnational Revenues.....	39
Questions and Problems # 4.....	41
Self-Assessments #4.....	49
V. PUBLIC FINANCE IN A FEDERAL SYSTEM.....	52
5.1. Structure and General Characteristic of Federal State.....	52
5.2. Optimal Federalism	53
5.3. Intergovernmental Grants (Transfers).....	55
Questions and Problems # 5.....	57
Self-assessments # 5.....	71
VI. REFERENCES	73

I. Public Sector of an Economy

1.1. Forms and Methods of Interaction between Private Sector and State

Concepts

Characteristics of the standard microeconomic model without government intervention:

- the target functions of householders and firms
- absolute information
- transaction costs are equal to zero
- unconditional recognition of property rights
- equality of aggregate accounts receivable and accounts payable market agents
- Pareto efficiency

The *public economics* theories are based on the assumption that there are cases when one or several characteristics of the model are absent. Thus such markets cannot secure an efficient work of the economic system.

The market would not create *public goods* such as national defense or provide less than socially needed. It is the state who should supply those goods.

Limitations of the functioning of the standard microeconomic models:

- lack of completeness of the information
- failure of voluntary observance of the agreement
- lack of voluntary recognition of property rights of counterparts

Government intervention is justified by:

- neutralization of externalities
- creation of income redistribution mechanisms
- necessity of business cycle regulation

The distinctive features of the interaction of market agents among themselves and with the government are:

- voluntary
- coercion

The essence of the state from an economic point of view is:

- the coercion structure
- creating the conditions for compliance and transactions
- ensuring the property rights
- activity assisted to Pareto improvement
- influence on market agents behavior if it entails a Pareto worsening.

1.2. Market and State Failures

Concepts

Market Failure is

- a situation in which a market left on its own fails to allocate resources

Market failures include:

- market power
- externalities
- asymmetry of information

Government failure (or non-market failure) is

- the public sector analogy to market failure and occurs when a government intervention causes a more inefficient allocation of goods and resources than would occur without that intervention

There are many different kinds of *government failures* that describe corresponding distortions:

legislative (crowding out, logrolling, pork barrel spending, rational ignorance, rent seeking such as gerrymandering, short time horizons, licensing and permits);

regulatory (regulatory arbitrage, regulatory capture, regulatory risk);

information assessment (environmental impact, imperfect information, market distortion such as tax structure, regulatory ordering, subsidization, risk assumption, unintended consequence).

1.3. Functions of Public Finance

Concepts

Public finance:

- focuses on the taxing and spending activities of government and their influence on allocation of resources and distribution of incomeⁱ
- system of organization of monetary relations in which a government is involved in one form or another

Structure of Public Finance in Russia includes:

- federal budget
- budgets of the subjects of Russian Federation
- extra-budgetary funds of Russian Federation and Subjects of Russian Federation
- government credit
- tax system
- non-tax revenue to a budget and extra-budget funds
- budget system

Musgrave's Three-Function Framework

- the allocation function is to see that resources are used efficiently
- the distribution function is to achieve an equitable distribution of income
- the stabilization branch is to assure the achievement of high employment and price stability.



1. Please, read Chapter 1 in Harvey S. Rosen textbook. What is Public Finance? What does Public Economics examine?

2. Main aspects in the debate on government intervention to an economy depend on different views of government.

Organic view means _____

Mechanistic view means _____



3. Please, read chapter 4, p.38 in Harvey S. Rosen textbook. "Pure Exchanged Economy". What are the characteristics of the model to justify government intervention?

4. What is an alternative to institutionalized coercion?

5. Let us recall target functions of market agents.

The target function of a householder is _____, the target function of a firm is _____.



6. Please, read chapters 3 and 4 in Harvey S. Rosen textbook. What are tools of public finance?



7. Please, read chapter 2 in Harvey S. Rosen textbook. The scope of the public sector in an economy can be measured:

1. _____
2. _____
3. _____

8. *What are market failures?*

1. _____
2. _____
3. _____

9. *What are government failures?*

1. _____
2. _____
3. _____



10. Please, visit the web site <http://dictionary.sensagent.com/government+failure/en-en/> and explain what *passive Government failure* means.

11. *Give examples of any three government and market failures.*

1. _____
2. _____
3. _____

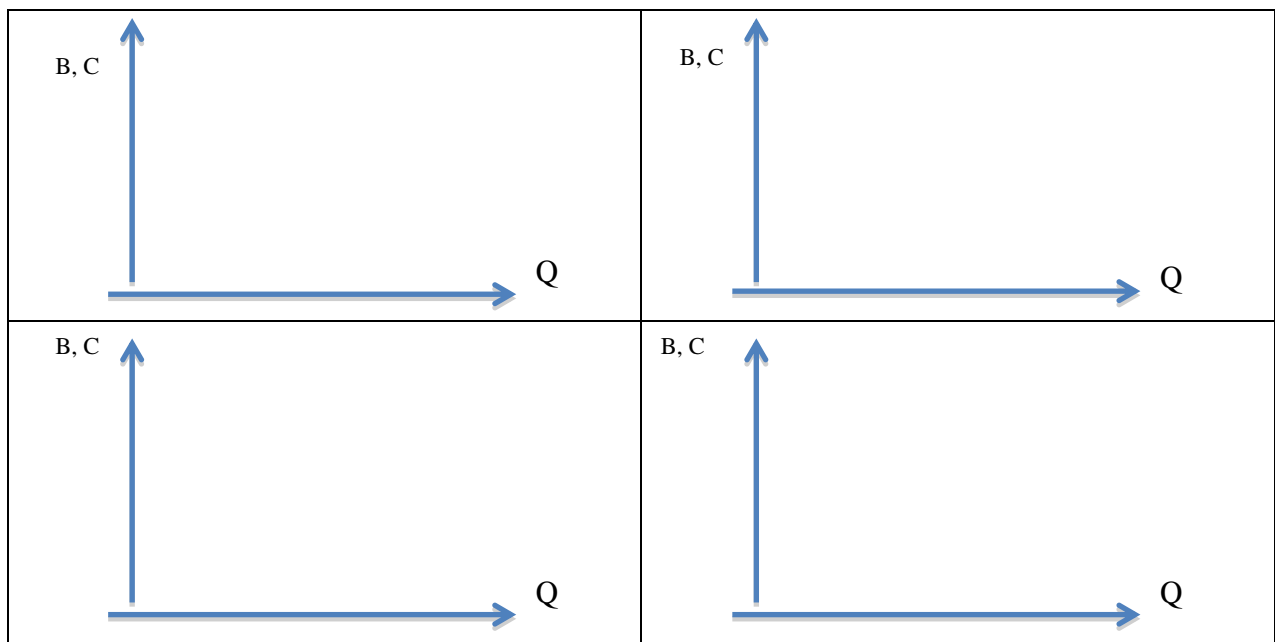


12. Let us recall graphic analysis of externalities, so please, read chapter 6 in *Harvey S. Rosen textbook*.

Plotted on figures below a) negative externalities in consumption; b) negative externalities in production; c) positive externalities in consumption; d) positive externalities in production



Activity 1.1.





13. Please, read Core text 1. Three-Functions Framework by Charles E. McLure, Jr.



Activity 1.2.

Now check if you can apply the three concepts of specific tasks of government. Which activities belong to which state function?

Tasks	Allocation	Distribution	Stabilization
To maintain public roads			
To run public education			
To reduce unemployment			
To provide public lighting			
To provide social benefits for the poor			
To control inflation			
To manage public debt			
To set standards for environmental pollution			
To provide national defense			
To implement regional development policy			

Self-assessments # 1



Question 1.1.

Supply of public goods: $P = 20 + \frac{1}{2} Q$.

Marginal private benefits: $P = 40 - \frac{1}{2} Q$.

Marginal social benefits: $P = 60 - \frac{1}{2} Q$.

What kind of externalities causes these goods? What should the government do?

**Question 1.2.**ⁱⁱ

Students are willing and able to pay for their study: $P = 50 - 0.5N$, (N – the number of students). Marginal social benefit is given by $MSB = 70 - 0.5N$. Total costs of the University for training students given by $TC = 10N + N^2$. Determine:

- a. Quantity and type of an externality;
- b. How many students meet their maximum total utility?
- c. How many students meet maximum social utility?
- d. The amount of tuition per student and the amount of subsidies for training, corresponding to the maximum social utility of higher education.

**Question 1.3.** ⁱⁱⁱ

The costs of the University to train each student are given: $MC = 4N$, where N – the number of potential students. Demand for higher education in the region:

$P = MPB = -4N + 300$, где P – tuition for study in thousands of monetary units (m.u.).

Before the opening of the university students either have served in the Army or bought out the military service. Each payment was estimated in 1800 thousands of monetary units annually. The opening of the university transforms the payment from the negative externalities into positive ones. Proponents of military service say that reducing the number of conscripts damaging the country's defense, the magnitude of which increases according to the formula $MEC = N^2$, where MEC – marginal damage to society. Define:

- a. Number of students, demanded by the market and how it differs from the socially efficient quantity.
- b. What should the government do in order to market and society demanded quantities coincide?
- c. How the government can neutralize potential damage imparted the country's defense caused by the opening of the university?
- d. Answers to provide analytically and graphically.

II. Public Choice

2.1. Public Choice: Definition and Stages

Concepts

Public Choice has been described as "the use of economic tools to deal with traditional problems of political science"¹

Public Choice theory studies the methods of design-making in public sector of economy through democratic procedures.

Stages of Public Choice for a society:

- anarchy
- constitutional choice
- post - constitutional choice

Arrow's impossibility theorem –

- a social-choice paradox illustrating the impossibility of having an ideal voting structure that is reflective of specific fairness criteria, such as Pareto efficiency
- states that a clear order of preferences cannot be determined while adhering to mandatory principles of fair voting procedures.²

2.2. A Man and a State

Public Choice theory implies that a man can play one of the following roles in his interaction with the state:

- a voter
- a elected politician
- a bureaucrat (public employee)

He or she has own objective function depending on the role:

- for voters – maximization the difference between available public goods and taxes paid
- for elected politicians – maximization the difference between public resources under regulation or control and expenses for election campaign; to be elected (reelected)

¹ Gordon Tullock, [1987] 2008, "Public Choice". The New Palgrave Dictionary of Economics. Abstract

² <http://www.investopedia.com/terms/a/arrows-impossibility-theorem.asp>

- for bureaucrats – maximization the difference between amount of financial resources managed and expenses for education (investments to human capital); impact on legislators

Other actors of public choice:

- the judiciary
- journalists
- experts

Some additional characteristics of public choice:

- Rational ignorance
- Fiscal illusion
- Special interests group
- Rent seeking
- Logrolling.

2.3. Modern Political Systems

The essence of the democratic structure of the state is to ensure a diverse of individual preferences in the production, financing, and the redistribution of public goods. The type of the political system determines the possibility of arranging of alternative states of society.

Main political systems are:

1. Democracy (Direct and Representative)
2. Republic
3. Monarchy
4. Communism
5. Dictatorship

Democracy as a decision procedure can be performed in any political system.

There are several procedures of decision making in direct and representative democracies:

- *Plurality voting: Simple majority; Relative majority – first-past-the-post*
- *Borda Count Method:* each candidate (or alternative) gets 1 point for each last place vote received, 2 points for each next-to-last point vote, etc., all the way up to N points for each first place vote (where N is the number of candidates/alternatives). The candidate with the largest point total wins the election
- *Condorcet scoring:* all candidates are ranked and compared in pair-wise elections, whoever has the most wins is elected
- *Copeland scoring* or Copeland's pairwise aggregation method is a method in which candidates are ordered by the number of pairwise victories, minus the number of pairwise defeats

- *Approval voting*: is a voting procedure in which voters can vote for as many candidates as they wish. Each candidate approved of receives one vote and the candidate with the most votes wins³
- *STV – single transferable vote (IRV – Instant-runoff voting)*: The Single Transferable Vote (STV) is a form of proportional representation which uses preferential voting in multi-member constituencies. Candidates don't need a majority of votes to be elected, just a known 'quota', or share of the votes, determined by the size of the electorate and the number of positions to be filled⁴.

Questions and Problems # 2



1. Please, read [Core text 2.1](#). What are objects of Public Choice Theory?



2. Please, read [Core text 2.1](#). What principles underlie in Public Choice Theory?



3. Please, read [Core text 2.1](#). Examine the actions of legislators and public employees.

4. Please, read [Core text 2.2](#).

³ <http://www.ctl.ua.edu/math103/voting/approval.htm>

⁴ <http://www.electoral-reform.org.uk/single-transferable-vote/>



Activity 2.1.

Try to explain what “The tyranny of the minorities” means.



5. Please, read Core text 2.3. Explain the differences between “Democracy” and “Republic”. Are any peculiarities of voting procedures in dependence of a political system?

6. Fill in the table below.



Activity 2.2.

Top six voting procedures

Type of Voting	Endowment	Allocation	Aggregation
Plurality voting			
Borda voting			
Condorcet scoring			
Copeland scoring			
Approval voting			
STV (IRV)			

Task 2.1.

Preferences of four groups of voters are in the table. They have to choose one of four projects: A, Б, В, Г.

Group 1 (4 voters)	Group 2 (6 voters)	Group 3 (7 voters)	Group 4 (8voters)
A	A	Б	Б
Б	Б	Г	Б
В	Б	В	Г
Г	Г	A	A

Who will win in the case of

- a) *Plurality voting*
- b) *Borda Count Method*
- c) *Condorcet scoring*
- d) *Copeland scoring*
- e) *STV.*

Self-assessments # 2



Question 2.1. Overview of Stages of Public Choice in the country

1. What are distinguishing characteristics of each stage: anarchy; constitutional choice; post - constitutional choice?

2. Analyze the stages that your country has passed through; Mention time frames and main institutions arising during the stage.

3 Unit

III. Public Goods and Expenditures

3.1. Public Goods Characteristic

Concepts

Classification of goods in Economics:

- economic and free goods
- complementary and substitution goods
- factors of production and finished commodity
- private and public goods

Classification of goods according to the following criteria:

- non-excludability (excludability)
- non-rival (rival)

Public goods have two distinct aspects:

- non-excludability consumption the cost of keeping nonpayers from enjoying the benefits of the good or service is prohibitive
- non-rival consumption – when something can be consumed without reducing the benefits available for subsequent consumption, in other words it can be consumed without supporting a rivalry between consumers

Other characteristics of public goods:

- territorial coverage of the "useful" effect
- social significance.

3.2. The Balance in the Production of Public Goods

Concepts

Features of the aggregate demand in equilibrium conditions for the production of private and public goods:

- private goods are summed horizontally:
 - ✓ Exclusive: once you buy it, you own it and can consume it as you please
 - ✓ Rival: A good taken off the shelf isn't there for other people to consume
- public goods demand is summed vertically:
 - ✓ The group willingness to pay is found by summing of individual value for the unit of a public good

Efficient production levels of public goods:
partial equilibrium

$$\sum_i^n P_{di} = MC.$$

where P_{di} – individual value of the unit of public good;
 MC – marginal costs of providing of the additional unit of public good.

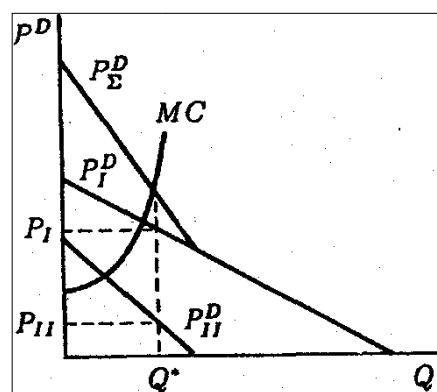


Figure 3.1. Equilibrium for numeracies public goods

Lindahl Equilibrium

- individuals pay for the provision of a public good according to their marginal benefits in order to determine the efficient level of provision for public goods
- in the equilibrium state, all individuals consume the same quantity of public goods but may face different prices because some people may value a particular good more than others
- the Lindahl equilibrium price is the resulting amount paid by an individual for his or her share of the public goods^{iv}

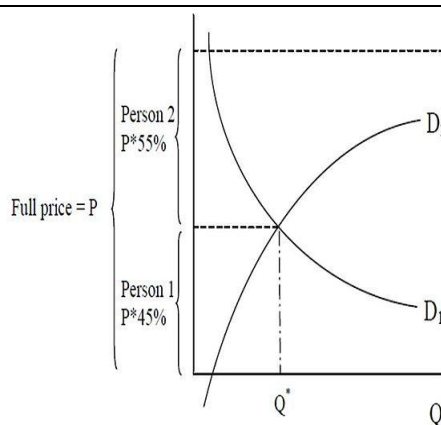


Figure 3.2. Lindahl Equilibrium

A Lindahl (benefit) tax

- ✓ is a form of taxation in which individuals pay for the provision of a public good according to their marginal benefits

The Lindahl tax would be progressive

- if the assumption that willingness to pay for a public good increases with income
- if this assumption holds, then the tax rate rises with income

The Samuelsonian Provision Condition for the provision of public goods

- states that public goods must only be provided to the point where the benefits provided are greater than, or equal to, their cost to society and vice-versa
- private production should only be allowed up to the point where society would achieve greater overall benefit through public provision

Characteristics of Model of General Economic Equilibrium

- there are two types of goods in the economy: private (P) and public (G)
- U_A – indifference curve of consumer A; U_B – indifference curve of consumer B;
- Z_1Z_2 - transformation curve;
- Utility of consumer A is exogenous;
- preferences of consumer B assigned by set of indifference curves U_B ;
- C_1C_2 - boundary of a set of consumption possibilities for consumer B;
- tangency point of U_B and C_1C_2 is optimum decision for consumer B, where his utility is maximized for a given consumer opportunities

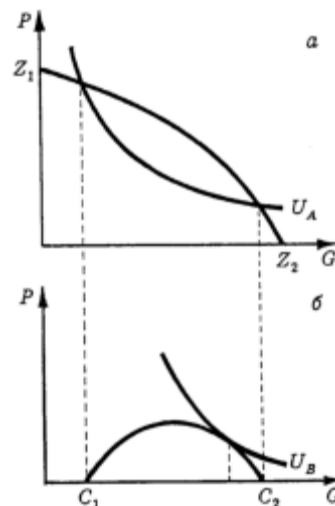


Figure 3.3. Model of General Economic Equilibrium

The Samuelsonian Provision Condition:

$$MRS_{P,G}^B = MRT_{P,G}^B - MRS_{P,G}^A$$

$$\sum_{i=1}^I MRS_{P,G}^i = MRT_{P,G}$$

Under the optimal provision of public goods the marginal rate of transformation between the public good and an arbitrarily chosen private good is equal the sum of marginal rates of substitution of these two goods for all individuals involved in their consumption

$$MRT_{P,G} = MRS_{P,G}^B + MRS_{P,G}^A$$

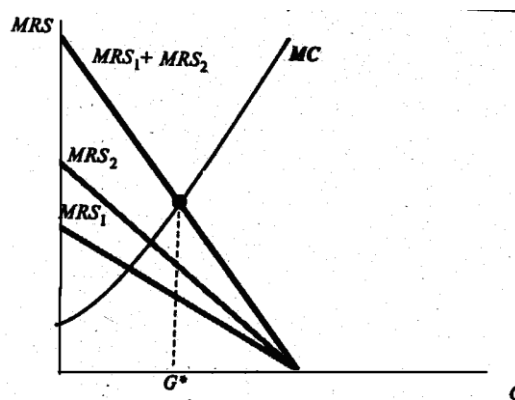


Figure 3.4. Graphic interpretation of Samuelson condition

3.3. Collective Action

Concepts

Collective action

- is a condition for the provision of public goods through the collaboration of two or more individuals

Collective action problem^v

- describes the situation in which multiple individuals would all benefit from a certain action, which, however, has an associated cost making it implausible that any one individual can or will undertake and solve it alone. The rational choice is then to undertake this as a collective action the cost of which is shared

Limitations of automatic voluntary involvement of individuals in collective action:

- free rider problem – the incentive to let other people pay for public good while you enjoy the benefits
- the prisoner's dilemma – a paradox in decision analysis in which two individuals acting in their own best interest pursue a course of action that does not result in the ideal outcome^{vi}
- tragedy of the commons - an economic problem in which every individual tries to reap the greatest benefit from a given resource. As the demand for the resource overwhelms the supply, every individual who consumes an additional unit directly harms others who can no longer enjoy the benefits. Generally, the resource of interest is easily available to all individuals

M. Olson's conceptions of selective incentive:

- “only a separate and ‘selective’ incentive will stimulate a rational individual in a latent group to act in a group-oriented way”
- members of a large group will not act in the group's common interest unless they are motivated by personal gains (economic, social, etc.)
- there are specifically distinguishes between large and small groups, the latter of which can act simply on a shared objective. Large groups, however, will not form or work towards a shared objective unless individual members are sufficiently motivated^{vii}.

3.4. Club Theory

Concepts

Club goods

- *are excludable.* Individuals who do not contribute to financing the club can be prevented, at relatively low cost, from gaining access to the benefits of club membership

- *are congestible*. Although consumption is not entirely rivalrous (there is not, as in the case of a private good, a one-to-one relationship between the amount consumed by one person and the amount available for consumption by others), each member of the club imposes a negative externality on his fellows. That negative externality materializes in the form of crowding, which degrades the quality of the benefits consumed by all
- *are divisible*. Once a club's membership has reached its optimal size, individuals who want to join but have been excluded can form a new club to produce and consume the same good. Clubs can in principle be cloned as the demand for them warrants^{viii}.

Examples of club goods include:

- private golf courses
- cinemas
- services provided by social or religious clubs to their members
- European Union.^{ix}

3.5. Peculiarities of Expenditures Assignment

Concepts

Expenditures assignment means

- the determination of the level of government which is responsible for specific functions and activities that belong to public sector

The Primacy of Expenditure Assignment in Intergovernmental Fiscal Relations Design

- the expenditure assignment determines the revenue requirements of the different levels of government.

There are three dimensions, which are considered in making assignments:

- *defining*
- *financing*
- *providing*.

"Subsidiary" principle

- responsibility for the provision of services should be at the lowest level of government compatible with the size of "benefit area" associated with those services.

The most important criteria for assigning local functions:

- type of function
- subsidiarity

- redistribution
- service or benefit area
- scale
- cultural values
- size and diversity.

In transition economies the first step in assignment expenditures is *decentralization*

- all forms of sharing or transferring authority or responsibility between the national government and any other level of government, including local or regional offices of the national government itself as well as local governments
- an alternative use of the term is narrower, covering only the transfer of authority for certain functions from the national to local governments. This use of the term excludes the transfer of authority within a given national institution.

Deconcentration:

this is a term that usually refers only to the service authority or responsibility assigned to a lower-level unit within a larger organization.

Delegation:

this term usually refers only to those cases in which one government institution relies on another to perform some or all of its functions and responsibilities. There is no transfer of functions.

Devolution:

as with decentralization, this is a term that may have a generic meaning that refers to the process of transferring authority and responsibility for certain functions from the national to local governments^x.

Questions and Problems # 3



1. Please, read Core text 3 ph.1 "Lindahl Equilibrium". What are the critical arguments lead Samuelson to the Lindahl theory?



2. Please, read Core text 3 ph.2 "Lindahl Taxation". When the Lindahl tax cannot be progressive?



3. Please, read Core text 3 ph.3 "Public Goods". Explain the meaning of concept "Nonuse benefit".

4. Please, read Core text 3 ph.3 "Public Goods" again.



Activity 3.1.


Some consider EU as a club good. Please, by using the terminology of goods classification, confirm or refute the statement.





5. Please, read Chapter 5 in Harvey S. Rosen textbook.

For *public good* the group willingness to pay is found by _____ summation of the individual demand curves. For *private good* the group willingness to pay is found by _____ summation of the individual demand curves. Explain why?

6. Please, list the limitations of automatic voluntary involvement of individuals in collective action.

 7. Read now paragraph 4 “The Roles of the Public and Private Sectors in the Economy” of Core text 3 before continuing. Could you give the definition of “expenditure assignment”? What should come the first in transition economies: privatization or expenditure assignment? Why?

 8. Please read paragraph 5 “The Primacy of Expenditure Assignment in Intergovernmental Fiscal Relations Design” of Core text 3. Give some reasons of primacy of expenditure assignments.

 9. Please read paragraph 6 “Dimensions of Expenditure Responsibilities” of Core text 3. Expenditure responsibilities have at least three important dimensions, and each can be resolved in a variety of ways consistent with some role of local governments in a functional area. These three dimensions that must be considered in making assignments are

1.

2.

3.

Do not forget to give the definition of each dimension.

10. Please fill in the following table showing the division of expenditure responsibilities among levels of government in your country. To help you we gave the U.S. as an example (see paragraph 7 of Core text 3). Where you are going to indicate two or more levels, please list them in order of importance.



Activity 3.2.

Where C – central government, R – regional government, L – local government

Function	Define	Finance	Provide
Education primary schools secondary schools universities			
Housing and Community Amenities public housing rent subsidies trash collection and disposal water supply sewerage sanitation			



11. Please read paragraph 8 “General Principles of Expenditure Assignments” of Core text 3. Please list the most important criteria for assigning local functions.



12. The part of paragraph 8 of Core text 3 argues for a clear and stable assignment. The main statements are:



13. Please read paragraph 9 “Capital Investment Responsibilities and Borrowing” of Core text 3.



Activity 3.3.

Based on the text, please answer the following questions:

1. What are the main reasons for the decentralization of capital investment decisions?

2. When would a “moral hazard” type of problem arise?

3. Why is a multi-year capital planning horizon important?

4. What is the reason for borrowing of subnational governments and public utilities?

5. Why do you think borrowing is an undesirable activity in many countries?

6. Why is borrowing efficient?

7. Conceptually, what are the two available forms of financing?



14. In paragraph 9 “Capital Investment Responsibilities and Borrowing” of Core text 3 you found a new term: “Financial Intermediaries”.



Activity 3.4.

1. What are the advantages of a financial intermediary program?

2. What is the main risk of such a program?



15. Please list the main issues which should be regulated by a framework for subnational government borrowing (use for help paragraph 9).



16. Now read Core text 3 paragraph 10 “Municipal Development Funds and Intermediaries” and answer the following questions.



Activity 3.5.

What is a Municipal Development Fund?

What are the municipal development intermediaries?

The objectives of the MDF are

Examples for management

Task 3.1.

Under the conditions of perfect competition a company is read to deliver a good “A” in any amount. Marginal costs of the company are equal 4 m.u. and are constant.

Demand of group A and B of consumers are $Q_A = 40 - 2P$; $Q_B = 20 - P$

Find the efficient level of provision if the good is: A) private; B) public.

Task 3.2.

Willingness of three houses of residents of the district to pay for landscaping are

$P_1 = 80 - Q$; $P_2 = 60 - Q$; $P_3 = 40 - Q$	where P – is maximum money sum which residents of i – th house agree to pay for a tree.
--	---

Total costs of landscaping are: $TC = 10 + 2Q + 0.5Q^2$

Find:

- A) Pareto efficient number of trees;
- B) How many trees will be planted, if a firm conducting landscaping set a price for each tree at the level of:
 - a) average costs;
 - b) marginal costs;
 - c) whether all residents will participate in the financing of landscaping?

Task 3.3.

Data about profits and costs of three groups (A, B, C) of consumers of public goods is shown in the table below.

- A) fill in the tables;
- B) define the optimal numbers of trees;
- C) how many trees will be planted if the costs and benefits are distributed as shown in the tables below.

Table 3.1.

Even and uneven distribution of benefits

Number of trees	TR	MR _Σ	MR _i			MR _i			MC _Σ = 60		
			50 %	30 %	20 %	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%
1.	180										
2.	340										
3.	480										
4.	600										
5.	700										
6.	780										
7.	840										
8.	880										

Table 3.2.

Even and uneven distribution of costs

Number of trees	TC	MC	MC _i			MR _Σ = 60		
			50 %	30 %	20 %	33.3%	33.3%	33.3%
1.	180							
2.	340							
3.	480							
4.	600							
5.	700							
6.	780							
7.	840							
8.	880							

Please, complete the statements:

If the costs and benefits are shared equally between consumers of public goods, the production of public goods is _____ optimal level of the good.

If the costs are distributed evenly, and the benefits are unevenly between users of the public good, the production of public goods _____ optimal level of the good.

If the costs are distributed unevenly, and the benefits are evenly between users of the public good, the production of public goods _____ optimal level of the good.

Please, try to explain these statements in terms of public expenditures and taxes.



Question 3.1. Overview of Expenditure Assignment

1. What is the risk of focusing on the revenue side of decentralization, when central transfers for subnational governments are put into place before the functional competencies are clearly defined?

2. Give three reasons for a clear expenditure assignment

3. Mention three fundamental principles of expenditure assignment

4. Why does the economic theory say that there is no absolute best way for deciding which level of government should be responsible for the different public services?



Question 3.2. Capital Investment Responsibilities

1. What are the main reasons for the assignment of capital investment responsibilities to subnational governments?

2. Please explain why borrowing is an efficient method to finance capital investments.

3. What kinds of possibilities do the small local governments have to finance their capital investments?



Question 3.3. *Development Fund*

1. Do you know about any Development Fund in your country? What kind of management does it have?

2. If it has direct administration by the central government, what is its central agency?

3. What are the major sources of funds?

4. Do these institutions have the power to issue bonds?



Question 3.4. *Municipal Borrowing*

1. Give some reasons why debts of subnational governments should not be considered as central government debt.

2. What is the international practice for the ceiling on the expenditure on debt service as percent of the annual subnational total expenditures?

3. What is the relation between MDF and MDI?

4 Unit

IV. Public Revenues

4.1. Sources of Government Revenue

Concepts

Specific functions of the state in a market economy are related:

- the regulation of resource allocation;
- the distribution of income;
- exposure to fluctuations in economic activity in the business cycle.

There are several sources of government revenue:

- 1) taxes;
- 2) non-taxes;
- 3) public entrepreneurship;
- 4) intergovernmental transfers (for subnational governments);
- 5) loans;
- 6) revenue from privatization^{xi}.

1) Taxes

- are specific resources of a state in market economy for public goods producing;
- a fee charged (levied) by a government on a product, income or activity^{xii}.

In Russian Tax Code:

- a tax shall be understood to be a compulsory and individually non-refundable payment which is collected from organizations and physical persons by means of the alienation of monetary resources which belong to them on the basis of the right of ownership, economic jurisdiction or operational management for the purpose of financing the activities of the State and (or) municipalities.
- a tax is set if defined its elements:
 - the object of taxation;
 - the tax base;
 - the tax period;
 - the tax rate;
 - the procedure for the calculation of tax;
 - the procedure and deadlines for the payment of tax.^{xiii}

2) Non-tax

non-tax revenues - the provision of paid services to other economic agents:

- A *levy* shall be understood to be a compulsory contribution collected from organizations and physical persons the payment of which is one of the conditions of the performance by State authorities and local government bodies in relation to the levy payers of particular legally significant acts, including the provision of particular rights or the issue of permits (licences)^{xiv}.
- *State duty* is a levy which is collected from the persons referred to in Article 333.17 of Tax Code when they apply to State bodies, local government bodies, other bodies and (or) officials which have been authorized in accordance with legislative acts of the Russian Federation, legislative acts of constituent entities of the Russian Federation and normative legal acts of local government bodies for the performance in relation to those persons of legally significant acts which are envisaged by Chapter 1 of Tax Code, with the exception of acts which are performed by consular institutions of the Russian Federation.

3). *Public Entrepreneurship*

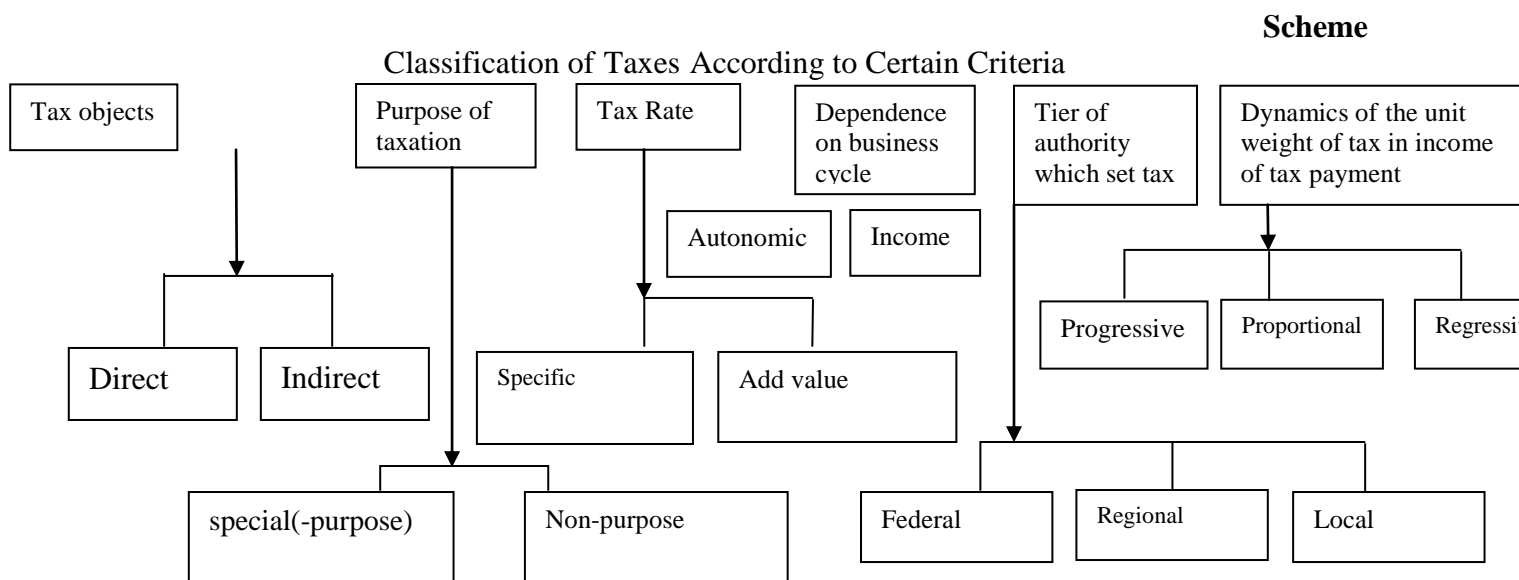
- profitable use of previously accumulated resources of the public sector. Such resources include, above all, public ownership, which is regarded as the accumulated stockpiles.

4). *Intergovernmental Transfers*

- means that the central government passes over financial resources to the lower level of government to achieve some public purposes.

4.2. Tax Classification

Concepts



For the economic analysis of the progressivity (proportionality, regressivity) are used the terms:

- average tax rate $t(I) = T / I$;

- marginal tax rate $t' = \partial T / \partial I$.

Tax function is given as: $T = T(I)$

Depending on changes in the tax burden under variations of the size of the tax base distinguished the following tax rates:

- proportional
- progressive
- regressive.

There are four indicators:

- $a_1 = t'(I) - \bar{t}(I)$;
- $a_2 = \partial \bar{t}(I) / \partial I = 1 / I(t'(I) - \bar{t}(I))$;
- $a_3 = \frac{\partial T / T}{\partial I / I} = \frac{\partial T / \partial I}{T / I} = t'(I) / \bar{t}(I)$;
- $a_4 = \frac{\partial(I - T(I)) / \partial I}{(I - T(I)) / I} = \frac{1 - t'(I)}{1 - \bar{t}(I)} = 1 - \frac{I}{(I - T(I))(t'(I) - \bar{t}(I))}$.

4.3. Criteria for Evaluation of Tax Systems

Concepts

The tax system is a combination of the following installed in the State of the essential conditions of taxation:

- principles of taxation;
- procedures for establishing and imposing taxes;
- a system of taxes;
- the allocation of tax revenues among the budgets of various levels;
- rights and responsibilities of the participants of tax relations;
- the forms and methods of tax control, the responsibility of the participants of tax relations;
- how to protect the rights and interests of participants of tax relations.

The concept of "tax system" describes the tax law and order in general, the tax system is an element of the tax system.

The objectives of the Government in the construction of the tax system are:

- achieving fairness (equity);
- achieving efficiency.

There are two types of taxation systems:

- in the Schedule taxation system all income received by the taxpayer, is divided into parts – schedules, Each of these parts are taxed in a special way;

- system, all income of individuals and entities subject to the general taxation.

For comparison of tax systems and tax-oriented criteria are used in virtually.

I. The Relative Equality of Tax Liabilities:

connected with the idea of justice and the distribution of taxes in accordance with the express and approved by society approaches, as well as the absence of discrimination.

The relative equality is achieved due to the equality:

- *horizontal equity* is achieved when individuals are in the same position, pay the same value of taxes;
- *vertical equity* requires the payment of higher taxes by persons with higher levels of welfare.

The problem with this principle:

- selection criteria based on which to compare the parity of tax liabilities.

Modern tax systems are based on two approaches to determining the horizontal and vertical equity:

- the first approach: *the benefit principle of taxation* (equivalence principle);
- the second approach: *the principle of ability to pay*.

1. The equivalence principle

- is the part of contract theory of a state;
- taxes are specific fee for government services;
- requires that taxes be based on the level of benefit a taxpayer receives from public services. When a public service is financed exclusively from a benefit tax, it will be produced in such a quantity (and quality) that its costs do not exceed its benefits;
- can ensure that the provision level of public goods will approximate the socially optimal level as much as possible.

The principle can be considered in two sections.

a) in terms of market and economic equivalence:

- is based on determining the extent and structure of public expenditures, depending on the individual demand, and not from the political process of formation of voters' preferences in the production and distribution of public goods;
- the decision is made based on personal needs of the citizens by paying the "price" (tax) corresponding to their marginal benefit.

b) in terms of cost equivalency:

- suggests a connection between costs for public services and their financing;
- on this basis is possible to achieve cost recovery in specific services.

2. Principle “ability to pay” based on individually non-refundable payments. Taxes are:

- compulsory payments;
- the tax burden should be distributed in accordance with the economic opportunities of payers.

This principle is based on:

- the idea of justice;
- «relatively equal sacrifice for the common goal”.

The problems of completeness of accounting of solvency are related to:

- types of income (natural and money);
- forced expenditures which defined by health of tax payers, number of dependents and etc.

II. Economic Neutrality:

the absence or relative weakness of the distorting tax effects

III. The Organizational Simplicity

the effectiveness of taxation is higher, the lower the costs of tax collection

IV. Flexibility of Taxation

is ability of tax system to synchronize tax liabilities with a macroeconomic dynamics. More built-in stabilizers are in the tax system, the more flexible the system is

V. The Transparency of the Tax System

is ability of the electorate through political institutions to control the collection, distribution and redistribution of taxes.

4.4. Peculiarities of Subnational Revenues

Concepts

Revenue sources of local governments are

- 1) taxes;
- 2) user charges and fees;
- 3) intergovernmental grants;
- 4) other revenues (credit, revenues from assets or entrepreneurial activities).

Tax assignment problem in intergovernmental relations

- each level of government should be assigned taxes that are related to the benefits of its spending;
- the proper assignment of taxes that are related to benefits depends on the assignment of expenditure functions;
- the central government should be responsible for expenditures having benefits that extend across subnational boundaries or that are characterized by economies of scale not realized at the subnational level;
- Subnational government comes into its own in the provision of goods and services characterized by limited economies of scale and limited spillovers of benefits to other jurisdictions.^{xv}

In order to provide fiscal autonomy, revenues must exhibit three characteristics:

- there must be enough *own revenues*;
- revenues must be *marginal*;
- the principle of *subsidiarity in taxation* must be applied.

“Own” revenue

- an independently legislated and administered tax;
- other tax forms (shared taxes and tax surcharges under certain conditions)

Marginal revenues

are revenues whose level a government can control

Tax subsidiarity

a given tax should be assigned to the lowest level of government that can implement it (or for which it can be implemented) and for which it is not inappropriate

The benefit principle of taxation and tax assignment

each level of government should be assigned taxes that are related to the benefits of its spending

Generalized benefits

the benefits that cannot be closely related to taxes on beneficiaries

Proxy measures of generalized benefits

- consumption;
- income

Methods of assigning revenues to subnational governments

- independent subnational legislation and administration;
- subnational surcharges;

- tax sharing;
- revenue sharing.

We can distinguish between different methods of assigning revenues to subnational governments along four features:

- (a) which level of government chooses the taxes from which subnational governments receive revenues;
- (b) which defines the tax base(s);
- (c) which sets the tax rate(s);
- (d) which administers the tax(es).

What is to be expected of subnational revenue assignment methods?

- (1) they should provide fiscal autonomy for subnational governments;
- (2) they should be easy to comply with and administer;
- (3) they should be fair and neutral;
- (4) and they must accommodate interjurisdictional redistribution if necessary.

Questions and Problems # 4

1. *What is the difference between income and revenue generation by private agents and government?*

2. *What does a category “Public Finance” include?*



3. *Please, read Core text 4 (§1 “The difference between charges and taxes”).
What is the difference between charges and taxes?*



4. Please, read Article 8 (Tax Code, Part 1). Give definition of “tax”, “levy”, and “duty”.

Tax is _____

Levy is _____

Duty is _____



5. Please, read Article 17 (Tax Code, Part 1). List the elements of tax assessment; give brief definition of each element.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

6. Give a characteristic of VAT and Tax on Income of Physical Persons (TIPP), in accordance with Russian Tax Code, relying on criteria of Scheme (see above).



Activity 4.1.

Criteria	VAT	TIPP
1. Tax objects		
2. Purpose of taxation		
3. Tax rate		
4. Dependence on business cycle		
5. Tier of authority which set tax		
6. Dynamics of the unit weight of tax in income of tax payment		



7. Relying on Article 13 of Russian Tax Code Part 1 fill in the table below. In which criteria of tax classification the table based on?



Activity 4.2.

Federal Taxes	Regional Taxes	Local Taxes

8. Please pay attention to criteria 5 in activity 4.1. Does the tax status (federal, regional and local) correspond to the budget level, in which it enrolled? Describe tax on the profit of organizations, VAT, TIPP and fill the table below.

9. Describe tax on the profit of organizations, VAT, TIPP in accordance with the answer in previous task; and fill the table below.



Activity 4.3.

	Status of Tax	Budget level in which it enrolled
Tax on the profit of organizations		
VAT		
TIPP		

10. Consider indicators $a_1 - a_4$ (see 4.2. above). Compare them with 1 or 0 for each type of a tax: progressive, proportional and regressive.



Activity 3.4.

	a_1	a_2	a_3	a_4
Progressive tax				
Proportional tax				
Regressive tax				



11. Relying on Paragraph 2 “Own Revenues” (Core text 4), continue the sentences below.



Activity 4.5.

Grants can be considered own revenues provided _____

Shared taxes and tax surcharges can be considered own revenues provided



12. Relying on Paragraph 3 “Marginal revenues” Core text 4 give two examples of marginal taxes:



Activity 4.6.

1) marginal taxes are _____

2) marginal taxes are _____



13. Please, read Paragraph 4 “Subsidiarity in taxation” (Core text 4).



Activity 4.7.

1) What does ‘subsidiarity in taxation’ mean? _____

2) Why should the principle be applied? _____



14. After reading Paragraphs 5 “Alternative Methods of Revenue Assignment” and Paragraph 6 “Independent subnational legislation and administration” Core text 4 fill out the tables, putting crosses in the correct boxes.



Activity 4.8.

Distinguishing features of independent subnational legislation and administration:

Which level of government...	Central	Subnational
Chooses the tax from which the subnational governments receive revenue		
Defines the tax base		
Sets the tax rate		
Administers the tax		

Advantages and drawbacks of independent subnational legislation and administration:

Independent taxation assures	No	Limited	Yes
Fiscal autonomy			
Easy compliance and administration			
Fairness and neutrality			
Redistribution across jurisdictions			

As you have read in the text, independent taxation may lead to ‘complexities, inequities and distortions’. How can these problems be mitigated?



15. Read Paragraph 7 “Subnational surcharges” Core Text 4 and fill in the tables below



Activity 4.9.

Distinguishing features of subnational surcharges:

Which level of government...	Central	Subnational
Chooses the tax from which the subnational governments receive revenue		
Defines the tax base		
Sets the tax rate		
Administers the tax		

Advantages and drawbacks of subnational surcharges:

Independent taxation assures	No	Limited	Yes
Fiscal autonomy			
Easy compliance and administration			
Fairness and neutrality			
Redistribution across jurisdictions			



16. Read Paragraph 8 “Tax sharing” Core Text 4 and fill in the tables below.



Activity 4.10.

What does tax sharing mean? _____

Distinguishing features of tax sharing:

Which level of government...	Central	Subnational
Chooses the tax from which the subnational governments receive revenue		
Defines the tax base		
Sets the tax rate		
Administers the tax		

Advantages and drawbacks of tax sharing:

Independent taxation assures	No	Limited	Yes
Fiscal autonomy			
Easy compliance and administration			
Fairness and neutrality			
Redistribution across jurisdictions			



17. Read Paragraph 9 “Revenue sharing” Core Text 4 and fill in the tables below.



Activity 4.11.

What does revenue sharing mean? _____

Distinguishing features of revenue sharing:

Which level of government...	Central	Subnational
Chooses the tax from which the subnational governments receive revenue		
Defines the tax base		
Sets the tax rate		
Administers the tax		

Advantages and drawbacks of revenue sharing:

Independent taxation assures	No	Limited	Yes
Fiscal autonomy			
Easy compliance and administration			
Fairness and neutrality			
Redistribution across jurisdictions			



18. Read Chapter 23 “Tax on Income of Physical Persons”, Part 2 (Tax Code of RF). Please list tax deductions provided by the code.

On what approach to horizontal and vertical equity the TIPP is based on?

What a lack of the selected approach smooth deductions?

19. Formally describe the following taxes from the viewpoint of economic and legal progressivity (regressive, proportional)

- a) the income tax with a fixed legally established rate t and the non-taxable fixed income I_0 ;
- b) let all citizens regardless of income level required to make the budget a fixed amount of L , and beyond this - to pay for $t\%$ of income.

Tips: one of the taxes is defined as progressive tax with a fixed marginal rate, the second - regressive tax with a fixed marginal rate. Please, choose and prove your choice.

20. What are the taxes in Russia and your country are based on the benefit principle and the principle of ability to pay? Fill in the table below.

! Activity 4.12.

Country	Russia	Your country
Tax principle		
Benefit principle	1.	1.
	2.	2.
	3.	3.
Ability-to-pay	1.	1.
	2.	2.
	3.	3.

21. Please fill out the table below putting in the box Y (yes) if the tax corresponds with criteria or N (no) if it does not correspond.



Activity 4.13.

A comparative analysis of taxes on diverse criteria

Tax Criteria	Lump-Sum tax	Progressive individual income tax
The Relative Equality of Tax Liabilities		
Economic Neutrality		
The Organizational Simplicity		
Flexibility of Taxation		
The Transparency of the Tax System		

Task 4.1.

Define the character of the tax under following conditions. Income of taxpayer of \$ 16 000 is levied by tax of \$ 2000; if income is \$ 20000 tax liability is equal \$ 3000. Also estimate averages and marginal tax rates.

Task 4.2.

If taxpayer's income is less or equal to \$ 20000, tax rate is 15 %. For income exceeding \$ 20000 tax rate is 25 %. What is the amount of tax the taxpayer has to pay, if he received \$ 50000 in current tax period?

Task 4.3.

Mr. Smith is completing his tax return in USA. He is filing as a single taxpayer. His income in previous year was \$50 000 and suddenly he became beneficiary of luck so that his income increased up to \$87,300 in current year. Deductions are \$20,000. The rate is 15% for taxable income up to \$22,750, 28% of income between \$22,750 and \$55,100, and 31% of income above \$55,100.

a. Calculate his tax liability.

b. Calculate average tax rate.

c. Calculate marginal tax rate.

**Question 4.1. Overview of Individual Income Taxation**

Compare tax liabilities, average and marginal tax rate for the income of (1) \$ 50 000, (2) \$ 60 000, if tax is paid in

- a) Russia
- b) Your country.

Using terminology and notions which were considered in the Unit # 3, try to make conclusions about efficiency and justice of taxation in these two cases.

Also define indicators $a_1 - a_4$ for each case.

**Question 4.2.**

Mr. Ivanov purchased an apartment in Nizhny Novgorod for 2 000 000 pub. in 2011. Also he has a daughter 15 years old. In the same year he sold a garage which were bought in 2010 for 200 000 pub. His monthly income is 50 000 pub.

Define

- a. Tax is withheld by the employer (tax agent) in 2011
- b. Should mr. Ivanov provide a tax return? Why?
- c. If yes, please calculate the additional payments to the budget and tax reimbursement
- d. Calculate effective tax rate in 2011
- e. Give as much explanation of your answers as you can.



Question 4.3. *Independent Subnational Legislation and Administration*



Consider “Process Mapping” in “A Handbook for Tax Simplification” (<https://www.wbginvestmentclimate.org/uploads/Handbook%20of%20Tax%20Simplification%20-%20Web%20version.pdf>, p.78). Also recall an approach of “Independent Subnational Legislature and Administration”. Try to produce different procedures of this approach application in one or two economies.



Question 4.4. *Subnational Surcharges and Revenue Sharing*



Using the structure of the table. 9.2

(<https://www.wbginvestmentclimate.org/uploads/Handbook%20of%20Tax%20Simplification%20-%20Web%20version.pdf>, p. 200) and Tax Code of Russia, provide structure «Possible Tax Assignment – Three Responsibilities». Please determine the importance of subnational surcharges for subnational governments.



Question 4.5. *Revenue Sharing*



Using information in HM Revenue & Customs Research Report 33, figure 1, p.6 (<http://www.hmrc.gov.uk>) and Tax Code of Russia, provide and analyze a distribution of profit tax among different levels of budget system in Russia and in your country.

5 Unit

V. Public Finance in a Federal System

5.1. Structure and General Characteristic of Federal State

Concepts

- in a *unitary system* public sector decisions are dominated by one government
- while under *federalism* these decisions are made by different governments

The reason for the *federalist structure*

in most cases is the *size of a country* (Germany, Australia, Canada, United States), but sometimes it can be *traditional* (Belgium)

Federal Governments – a public sector with both centralized and decentralized levels of decision making in which choices made at each level concerning the provision of public services are determined largely by the demands for those services of the residents of the respective jurisdictions^{xvi}

Centralization Ratio – the portion of total direct government expenditures made by the central government.

The Tiebout Model^{xvii}

- if the public goods are local, i.e. that consumption of the public goods and locational choice are bundled, and then a market type solution may exist, at least “approximately”
- there is a world with a large number of communities offering different (and fixed) levels of local public good(s);
- as people sorted or “*voted with their feet*” to choose their most preferred community, they would reveal their demand for the public goods, thus overcoming the fundamental preference revelation problem that would hamstring governments from choosing optimal public goods levels;
- foot voting can serve as a mechanism to impact /constrain/discipline local government behavior.

Expenditure Assignments in Intergovernmental Fiscal Relations

- the determination of the level of government which is responsible for specific functions and activities that belong to public sector.

The Primacy of Expenditure Assignment in Intergovernmental Fiscal Relations Design:

- the expenditure assignment determines the revenue requirements of the different levels of government.

Revenue Assignments in Intergovernmental Fiscal Relations

which types of revenues (including taxes) are most suitable for use by each level of government.

Intergovernmental Fiscal Transfers

- a dominant feature of public finance in many countries;
- the appropriate level of transfers among governments in a country is often determined by appealing to notions of “fairness” and “equity”.

Optimal Federalism

Concepts

“The federal system was created with the intention of combining the different advantages which result from the magnitude and the littleness of nations”^{xviii}.

From a fiscal perspective, Tocqueville’s basic point of view would be considered as a suggesting that the presence of several levels of government suggests an opportunity to centralize decision making on those economic matters where national policies are needed and to allow “local” fiscal choice where it is most advantageous.

From economical point of view “fiscal federalism” is a sector with two or more levels of decision-making.

The central theoretical problem of the fiscal federalism is

- the determination of the optimal structure of the public sector in terms of the assignment of decision-making responsibility for specified functions to representatives of the interests of the proper geographical subsets of society.

This indicates a general outline for the appropriate division of fiscal functions between the central and lower-tiers of government.

Intergovernmental relations are based on decentralization of responsibilities and rights.

There are at least three economic explanations for this trend:

- efficiency argument;
- revenue mobilization argument;
- size of jurisdiction.

Conditions required for efficient decentralization

- 1) elected local government council;
- 2) chief local officers are appointed directly or indirectly by the elected local council;
- 3) local governments must have some taxing powers;
- 4) local governments must have some significant expenditure responsibility;
- 5) local governments must have some significant responsibility determining service levels;
- 6) local government must have adequate tax administration capacity to collect those revenue sources that are assigned to it.

State Functions

Musgrave separates state functions into three:

- macroeconomic stabilization;
- income redistribution;
- allocation.

Traditional theory says that

- stabilization is a central function, as subnational governments are open and cannot cope with business cycles and cyclical shocks;
- income redistribution also belongs to the central government according to the traditional view, while the differences among regional incomes cannot be solved in local level;
- resource allocation is considered to be an intergovernmental function. There are local services which have only local benefits and costs, but there are public goods, whose costs and benefits affect wider regions or whole countries.

The definition of the state functions by Musgraves, and Oates' decentralization theorem lead to the consequence that resource allocation *should be as decentralized as possible*.

Generally fiscal decentralization needs important decisions to be made in the following areas:

- 1) assignment of functions;
- 2) subnational finances and budgeting systems;
- 3) intergovernmental transfers;
- 4) borrowing and debt;
- 5) managing state-owned enterprises.

1. Assignment of Functions

A clear and stable set of expenditure assignment is a logical “first step” in the design of intergovernmental fiscal arrangements, as well as a necessary condition for accountability in the delivery of public services.

2. Assignment Criteria

There are some basic criteria which have to be taken into account when expenditure assignment decisions are made. In principle, each function of government should be assigned to the lowest level of government that encompasses all or most of the service benefits – provided that it can effectively manage the activity. This concept is called *subsidiarity*.

3. Financing Sub-National Governments

- user charges;
- subnational taxes;
- tax sharing.

4. Transfer, Borrowing and Asset Management

- *vertical fiscal imbalance* occurs when expenditures assigned to a given level of government exceed revenue from own sources;
- *horizontal fiscal imbalance* occurs when a net measure of revenue capacity and expenditure needs varies across subnational jurisdictions.

There are different *types of grants*:

- 1) formula-based “normative grants”;
- 2) categorical grants;
- 3) targeted matching grants;
- 4) unconditional;
- 5) conditional.

The borrowing sources are:

- 1) bond finance;
- 2) the commercial banking system;
- 3) a central government loan fund operating out of ministries of local government
a municipal development bank.

Intergovernmental Grants (Transfers)

Concepts

Grants from one level of government to another are the main method for changing fiscal resources within a federal system

In the intergovernmental relations the transfers generate conflicts between the central government and the subnational government.

Differences between transfers and own revenues

In the case of the local taxes there are different options which represent different levels of autonomy of the local governments:

- (a) local government sets tax rate and tax base;

- (b) local government sets tax rate only or;
- (c) local government sets tax base only.

If local governments do not have any say in the “design” of the local tax, it could not be considered as a local tax, but *a special transfer*.

Differences between transfers and loans

The *municipal loan* means typically a contract between a financial institution and the public sector.

If the loan is rationed by central government agencies and guaranteed by the central government there it should be considered as a “*transfer of investment possibilities*”.

The three main economic justifications of the transfers:

- vertical imbalance;
- horizontal imbalance;
- inter-jurisdictional spillover.

Designing Transfers

Analyzing the intergovernmental transfers two questions should be raised^{xix}.

First, how is the magnitude of the transfers (pool) defined:

- 1) a fixed proportion of the central revenues;
- 2) on formula basis;
- 3) on ad hoc basis.

Typically total transfers are determined as a combination of these three approaches.

Second, the way of the allocation of the transfers. The total divisible pool can be allocated:

- 1) as a special share of national government tax;
- 2) on an ad hoc basis;
- 3) as a reimbursement of approved expenditures.

Taxonomy of Transfers

Formula grants and earmarking:

- block grant;
-matching grant;
-effort related grant;
- conditional grant.

The role of intergovernmental transfers in:

- bridging Vertical Imbalance;
- solving the Problem of the “Spillover Effects”;

- bridging Horizontal Imbalance.

Methodological problems of the grants:

- measuring the fiscal capacity;
- measuring the expenditure needs.

Questions and Problems # 5



1. Please, read paragraph 1 "Federal System – Unitary System" ([Core text 5](#)), fill in the matrix with other examples.



Activity 5.1.

	Highly centralized	Highly decentralized
Federal system	Malaysia	United States
Unitary system	Japan	Hungary

2. Please choose the answer.



Activity 5.2.

Are the following statements true (T) or false (F)?

- 1) A unitary state generally is more centralized than a federal one.
- 2) In a unitary state one government makes all fiscal decisions.
- 3) Federalism is a compromise between a unitary state and complete decentralization.
- 4) Only in federalism can different governments exist independently of one another.
- 5) The goal of decentralization of government decision making is to increase technical efficiency.



3. We mentioned above three basic categories of decentralization: devolution, deconcentration, delegation. Please, read §2 “Models of Fiscal Decentralization” (Core text 5). What are the main dimensions of decentralization?

1. Devolution

2. Delegation

3. Deconcentration



4. Please read ch.21 (p.519-521) in Rosen Textbook and § 3 “Why Decentralize” in Core text 5. Give at least three reasons in support of fiscal decentralization. Also answer to the questions 5 and 6.



Activity 4.3.

1. _____

2. _____

3. _____

5. Why does fiscal decentralization may effect economic efficiency?

—

6. If there is a need for financing some public services which level of government should do it? Why?



7. Please read § 4 “Conditions Required for Efficient Decentralization” in Core text 5. Please list the required conditions for decentralization.



8. Please read ch.21 (p.516-519) in Rosen Textbook and § 5 “Rationales for Centralization” in Core Text 4 Core text 5. Give at least three reasons in support of fiscal centralization. Also answer to the questions 9 and 10.



Activity 4.4.

1. _____

2. _____

3. _____

9. What is the exposure problem?

10. What are the reasons for and consequences of this phenomenon?

11. As you studied from Unit # 1 Musgrave separates state functions into three: macroeconomic stabilization, income redistribution, and allocation. What are these functions?



Activity 5.5.

In the following table you can find a set of tasks that are usually carried out by different levels of the state. Could you indicate which tasks belongs to which state function?

Tasks	allocation	distribution	stabilization
to provide social transfers from rich to poor			
to provide social security			
to handle unemployment			
to provide national defense			
to build highways			
to control inflation			
to run the public health system			
to guarantee legal certainty			
to create an efficient local government system			
to provide public lighting			
to carry out regional policy, to transfer resources to the less developed regions from the richer ones			
to manage the national debt			

12. Which state functions belong to which state level according to the traditional theory of multilevel government? Please write an X to the appropriate box.



Activity 5.6.

Function	Central	Subnational
Macroeconomic stabilization		
Income redistribution		
Resource allocation		



13. Undertake reading paragraphs 6 “Financing Subnational Governments” Core text 5.



Activity 5.7.

Based on the text you’ve read, fill in the following table. Which taxes should be assigned centrally and which ones locally?

	Level of government	Why? (reasons)
VAT		
PIT		
Property tax		
Sales tax		



14. Undertake reading paragraph 7 “Intergovernmental Transfers” in Core text 5.

Designing a transfer system is difficult. Transfers often have a number of objectives.

**Activity 5.8.**

What objectives were mentioned in the text?

1) _____

2) _____

3) _____



15. Please read § 8 in Core text 5. Try to explain “Basic conflicts of the transfer”.



16. Please read §9 “Differences between Transfer, Own Revenues and Loans” in Core text 5. Note the differences between intergovernmental transfers and own revenues, and intergovernmental transfers and loans.



17. Please read § 10 “Transfers and the Accountability of the Local Governments” in Core text 5. In the literature there is a widely accepted view that the high level of transfers influences the accountability of the local governments.



Activity 5.9.

What does the core text say about it?

What does „get the price right” mean in relation to the transfers?



18. Please read § 11 “Vertical and Horizontal Fiscal Imbalance” in Core text 5. What is the difference between vertical and horizontal imbalance?

Vertical fiscal imbalance occurs when

Horizontal fiscal imbalance occurs when

19. *Overlapping effect of grants on vertical and horizontal imbalance.*

It is not easy to differentiate between grants used to compensate vertical and horizontal imbalance. A grant given to the local governments to compensate the vertical balance will have some effect on the horizontal inequity. In an optimal case the gap will be closed at the richest local governments. Certain grants, which are used for financing the difference between the expenditure needs and fiscal capacity even increase the horizontal inequity: for example, the shared taxes are unevenly distributed and usually favor the richer local governments. As long as the total aggregated resources of local government equal the total expenditure need there is no by definition vertical imbalance. However, in this case the rich local government will be over financed, and to correct it a “negative grant” has to be used. Politically this is very complicated, so the practice is that the grants managing horizontal inequity contribute to the decrease of the vertical imbalance.

The share of the transfers depends upon the differences among the local governments in terms of expenditure responsibility and fiscal capacity (own revenues). The vertical imbalance can be bridged by using an entitlement program with a transfer defined in proportion to the expenditures of the individual local governments. See what differences are made using the case of the average position (50 %), the maximum (67 %) and the minimum (25%). What consequences does the central government have to face in the different solutions?

Revenues, expenditures and grants per local government

Local governments	Expenditures	Own revenues	Grant based on local government with a position of ...		
			A (Average)	C (Maximum)	B (Minimum)
A	80	60	40	53.6	20
B	100	50	50	67	25
C	120	40	60	80.4	30
Average	100	50	50	67	30

Size of the grant pool as % of total expenditures

50%

67%

25%

If the central government uses 50 % grants it will cause the balance for government B, while government C will have budget deficit and government A will get budget surplus. In the second situation government A and B will have surplus, meanwhile the C will have balanced budget. Case with “Minimum” causes deficits for B and C and balanced budget for A.



Activity 5.10.

So it is possible to conclude that the first politic will cause _____ imbalance, the second one will have consequence such as _____ imbalance and _____ disparity. The third one also will cause _____. Thus there is no perfectly optimal policy, but the less harmful for subnationalities is the _____ policy.



20. Read § 11 in Core text 5 again and answer to the questions.



Activity 5.11.

How can you classify the grant system in the Philippines using the Bahl-Linn typology?

! **Activity 5.12.**

What are the problems in defining the pool as shares in different taxes?

! **Activity 5.13.**

On the basis of the core text, explain the term “risk sharing”. What kind of problems causes the lack of risk sharing?

! **Activity 5.14.**

Tax-sharing and revenue sharing methods are typically used to achieve vertical fiscal balance. However, there are other methods to solve the problem:

! **Activity 5.15.**

Why is it a problem that sharing rates vary with different taxes?

Firstly,

Secondly,



Activity 5.16.

What is the revenue-pooling system?



Activity 5.17.

Why policy of “fiscal dentistry” would lead to a sub-optimal solution?

“Fiscal dentistry” means



21. Please read § 12 “Alternatives for Grant System” in Core text 5. Try to find out several examples of noted types of grants in Russian legislature.



22. Read § 12 “Alternatives for Grant System” and § 13 “Taxonomy of Transfers” in Core text 5 and answer to the questions.

! **Activity 5.18.**

What is the difference between the revenue sharing based on formula and the grant where the pool is defined as a share of the national revenues and the allocation is based on the formula?

! **Activity 5.19.**

Please define the following terms:

block grant:

matching grant:

effort related grant:

conditional grant

! **Activity 5.20.**

Stability and flexibility are important characteristics of the transfer system. How can both be achieved?



23. Read § 14 “Matching Grants” in *Core text 5* and answer to the questions.

! **Activity 5.21.**

Defining expenditure needs, what role should the cost of services play? Conceptually is it acceptable to compensate local governments with larger costs? Give some examples illustrating the problem.

On the one hand,

On the other hand,

! **Activity 5.22.**

Matching rates are different for different services. What are the arguments for this?

**Activity 5.23.**

1. What is the reason why uniform matching rates discriminate against the poor local governments?

2. And what could be the solution to this problem?

3. In what way will the argument for this be different from the typical equalization arguments?

1)

2)

3)



24. Read § 15 “Fungability and Flypaper Effect” in Core text 5 and answer to the questions.

**Activity 5.24.**

How are the fungability and flypaper effect related?



Question 5.1.

Please read the text below. Was the structure of grants changed because of the financial crisis of 2008 in EU? Please note the changes.

OECD classification of grants

1. General purpose grants are those which can be used as if they were receiving subnational government's own tax revenues. Their use is limited only by the possible distinction between capital and current uses. Sometimes they may be of a capital nature, but they are not meant for specific investment projects for sectors. Shared taxes are not included in this category. Specific grants, which are earmarked for certain purposes, but the amount of which is so small that they can in no case cover the local expenditure completely and which are distributed according to objective criteria are to be included under this heading.

Related to objective criteria, means grants which are distributed according to some measures of taxable capacity and/or expenditure needs. Also this heading covers grants which have historically been distributed in a certain way and in the case of which legal or administrative limits or established custom are seen as preventing governments from changing the distribution of the grant very much from year to year. Grants related to the recipient's own tax effort are not included here, but under the following heading.

Related also to own tax effort are grants related to objective criteria and to an authority's own tax effort in such a way that an increase in the level of local taxation for a given authority results in an increase in the amount of grant for that same authority.

2. All other grants are classified as specific grants.

Conditional grants are those where the amount of grant (seen as revenue for each authority) depends on the expenditure of that same authority. They may be typically a predetermined percentage of the authorities' own expenditure. Note that grants whose overall amount depends on total local spending are not for this reason to be classified as conditional.

At standard costs means that the percentage refund only covers a certain standard cost or some similar amount. If local expenditure exceeds this amount a reduced grant, or no grant at all, is given.

At actual costs, no limit as to standard costs or the like exists. Not that this included 100 per cent grants. Sometimes such a 100 per cent grant is given because the local authority acts only as an administrative agent carrying out a precisely defined function on behalf of central government.

Under the heading of discretionary grants are included grants which the government may or may not distribute, and which are distributed at the discretion of the government according to the

particular circumstances of the authority in question. Normally, there would be no general criteria for the distribution of such grants^{xx}.



Question 5.2.

Please give examples for all categories of Bahl-Linn typology, using examples from Russia and your country, if they exist. Consider the types of intergovernmental aids in Russia which you can find in Chapter 16 of Budgetary Code of the Russia Federation (see core Text Folder)

Type A _____

Type B _____

Type C _____

Type D _____

Type F _____

Type G _____

Type H _____

Type K _____



Question 5.3.

Write down a public good provided by the state, which should be regulated at the state level and administered and financed at the local level. Explain your answer. You can use examples of Russia or your country.



Question 5.4.

Can you mention any cases in Russia when a local service or function was (re)centralized or was not decentralized because of the lack of local capacity? Try to mention a few conditions of efficient fiscal decentralization that doesn't apply to Russia.

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ОБЩЕСТВЕННЫЕ ФИНАНСЫ: РОССИЙСКИЙ И ЗАРУБЕЖНЫЙ ОПЫТ

Учебно-методическое пособие

Федеральное государственное автономное
образовательное учреждение высшего образования
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