## Seminar 9.

**Task 1.** In one country the personal income tax rate is 45%, the probability of detecting the fact of tax evasion - 0.37, the penalty rate - 50%, commissions paid by the taxpayer to intermediaries - 10% of real income, transaction costs for avoidance -10%. Is it profitable under these conditions for a taxpayer with a total income of 12,000 USD to declare only 40% of his income?

**Task 2.** The company receives a profit of 120 000 USD. The corporate income tax is 23%, the probability of inspection is 0.74; costs associated with the shadowing of income is 16%; the size of the penalty rate is 0.8; the probability of detecting a shadowed income in the case of inspection is 0.5. Determine the share of net income the company receives in the legal and shadow sectors, revenues and losses of the state.

**Task 3**. The company plans to make a profit of 1000 th. USD. The corporate income tax is 25%, the probability of inspection is 0.65; the probability of detecting a shadowed income at the time of the inspection is 0.5; the size of the penalty rate is 0.7; the costs associated with the shadowing of income are 11% of profits. Determine what part of its activities is shaded by the company, revenues and losses of the state.