

Task 1.

If $MPC=0.8$ and the tax rate is $t=0.2$, what will be the expenditure multiplier?

Task 2.

We have the following equation: $C=100+0.6Y_D$, $I=100$, $G=50$. We assume two tax scenarios: lump sum tax $T=50$ and proportional tax $t=0.2$. For each of them, answer the following questions:

- what is Y^* and what is the value of the expenditure multiplier (α)?
- By how much will Y increase if government spending increases by 20? What is the value of Y^* ?
- by how much will Y increase if T decreases by 20 and t falls to 0.1? What will be the value of Y^* then?

Task 3.

The following information is given: $I=60$, $G=50$, $C=0.75Y_D$, $t=0.2Y$. By how much will Y^* increase if government spending increases by 22? How much will the state deficit be then?

Task 4.

If $I=200$, $G=150$, $C=100+0.9Y_D$, $t=0.1Y$, what is the equilibrium consumption?

Task 5.

If $t=0.2Y$, $C=200+0.72Y$ (note that we have Y in the formula and not Y_D), $I=600$, $G=300$, what are Y and C at the equilibrium point? How and by how much will Y change if I decreases by 260? How much is the MPC ?

Task 6.

If $C=0.75Y_D$, $G=600$, $I=500$, and $t=0.2$, what is the budget deficit in equilibrium conditions? At what level of income will the budget be balanced? How much should investments increase to reach this level?

Task 8.

If $C=50+0.8Y_D$, $G=100$, $I=100$, $t=0.2$, $NX=200-0.2Y$, what are Y^* and the open economy multiplier?

Task 9.

If $C=100+0.9Y_D$, $G=150$, $I=200$, $NX=50$, $t=0.1$, what is the consumption at the equilibrium point?

Task 10.

If $MPC=0.75$, $t=0.2$, $MPI=0.15$, autonomous $NX=150$, autonomous consumption=50, $I=500$, $G=650$, what is the form of the aggregate expenditure function?

Task 11.

If $C=0.85Y_D$, $G=400$, $I=300$, $T=20+0.2Y$, $NX=200-0.2Y$, what is the equilibrium level of production? What is the value of the open economy multiplier? How much will production change if investments increase by 100?

Task 12.

If $C=10+0.7Y_D$, $G=15$, $I=20$, $T=15+0.2Y$, what will happen to the equilibrium level of output if taxes fall by 15? If budget expenditure increases by 15, by how much will Y change?

Task 13.

If the savings function has the following form: $S=-200+0.25Y_D$, $t=0.1$, $G=300$, $I=150$, what will C^* be? By how much should government spending increase so that consumption at the equilibrium point increases by 50?

Task 14.

If $C=200+0.9Y_D$, $G=300$, $I=600$, $t=0.2$, what are Y^* and C^* ? By how much should the tax rate change to maintain the same level of income and consumption if investment falls by 260?

Task 15.

If $C=300+0.8Y_D$, $G=100$, $I=100$, $NX=100$, and $t=0.2$, what is the product at equilibrium? What is the sum of outflows in the economy? What impact will an increase in the tax rate by 0.1 ($t=0.3$) have on the equilibrium level of output and consumption?

Task 16.

Explain theoretical issues:

- Potential production and actual production.
- What determines short-term equilibrium in Keynes' model - demand or supply?
- What is the main difference between the short run and the long run in economics?
- Definition of the multiplier.
- The paradox of forethought.
- Balanced budget multiplier.
- What is the specificity of the structural budget?
- Automatic stabilizers.
- What are the limitations to the possibilities of pursuing an expansionary fiscal policy?
- Laffer curve.