Macroeconomics
Winter term 2023
Tutorial 6

1. The following data is given in an economy:

$$G := 100 \quad I := 200 \quad C(y) = 300 + 0,75y$$

   (a) Determine the equilibrium income graphically and analytically within the framework of the Keynesian commodity market model.

   (b) The government increases spending by 10%, by how much does the equilibrium income increase?

   (c) The marginal consumption rate (based on the original formula) increases to 80%, by how much would government spending have to increase in order to achieve the same effect on equilibrium income as with the specified increase in the marginal consumption rate?

   (d) Show qualitatively and analytically that with the model $C(y) = c_0 + c_y y$ ($c_0 > 0$ and $0 < c_y < 1$) average consumption falls as income rises. With which concept from business administration can this property be compared and which assumption from micro is behind it?

   (e) Again based on the original data, the Central Committee of a managed economy plans to increase national income by 20% next year. The absolute increase is to be achieved through an increase in government spending with a simultaneous monitored increase in the marginal consumption rate by one percentage point. Monitoring can be achieved, for example, by reading WeChat accounts and movement data from the Corona-Warn-App. In China, for example, your daily behavior is already scored and your consumption options are determined based on your points account. Determine the necessary percentage increase in government spending.

   (f) Support your calculations with a diagram.