

## Problem

We consider a small open economy exposed to the corona pandemic.

We assume that considerable parts of private services are closed following orders from the government. The employees are laid off and receive according to existing law 60% of their salary as unemployment benefit from the government. The companies face liquidity problems because fixed costs incur even if production has stopped. Below you are asked to discuss the macroeconomic consequences. At this stage we disregard that the government responds with active measures to mitigate the negative consequences of the shutdown.

- a) Start out from a linear consumption function and discuss whether and how the households' demand for consumption goods is changed. Discuss whether there is reason to believe that the marginal propensity to consume is changing.
- b) Assume an investment function that is linear in the national product and the nominal interest rate. Also include a constant. Explain the economic intuition behind the investment function. Discuss whether there is reason to believe that the level of investment will change because of the pandemic.
- c) Assume an export function that is linear in the domestic product abroad and the nominal exchange rate. Explain the economic intuition. Discuss whether exports will be affected by the pandemic.
- d) Use a relevant macroeconomic model to discuss the total effects on GDP, consumption, investment and export.

Now suppose that the government responds with i) increased compensation to laid-off workers, ii) direct financial support to companies with liquidity problems and iii) increased funding for public projects such as road maintenance. The central bank lowers the interest rate.

- e) Use a macroeconomic model to discuss whether these measures will help reduce the drop in the national product in the country. Which of the measures can we expect to have the greatest impact on the national product in the given situation?
- f) Would you say that the model you have used in the discussion above is relevant to the current pandemic economic crisis?