

## Introductory Macroeconomics

In-Tutorial #3  
Week Starting 22rd March 2021

### Questions.

1. Consider a simple closed economy without government spending or taxation

$$C = 3000 + 0.5Y$$

$$\bar{I} = 1500$$

$$Y^* = 12000$$

For this economy, calculate exogenous expenditure, short-run equilibrium output, and the output gap. By how much would exogenous expenditure have to change to eliminate the output gap?

2. Now consider an economy with a government sector

$$C = 1850 + 0.6(Y - \bar{T})$$

$$\bar{I} = 900$$

$$\bar{T} = 100$$

$$\bar{G} = 100$$

- (a) Solve for the equilibrium level of output in this economy.
- (b) Suppose taxation increases by 50 units and government spending increases by 50 units at the same time. What happens to the equilibrium level of output? Define the budget surplus as  $\bar{T} - \bar{G}$ . What happens to the budget surplus?

