

Brief solution to Problem V.1

V.1 *Short questions.*

- a) Private income $\equiv Y_p^n = Y^n + X + rB$, hence “tax burden” as a proportional income tax rate is $\tilde{T}/Y_p^n = \tilde{T}/(Y^n + X + rB)$.
- b) $(C_g + I_g)/Y$.
- c) Total gov. expenditure = $C_g + I_g + X + rB$, total gov. revenue = \tilde{T} . The budget is balanced if $\tilde{T} = C_g + I_g + X + rB$.
- d) Budget deficit = $C_g + I_g + X + rB - \tilde{T}$, budget surplus = $\tilde{T} - (C_g + I_g + X + rB)$, primary budget deficit = $C_g + I_g + X - \tilde{T}$, primary budget surplus = $\tilde{T} - (C_g + I_g + X)$.
- e) I_g, I_p, S, B, r . Investment determines future productive capacity, saving matters for future wealth, government debt is a burden on future generations, and the interest rate is the rate of return on saving.
- f) Part of C_g as measured in national accounting is in fact in some sense investment (education, research at universities, health expenditure), hence beneficial for future generations.