Macroeconomics II

6. Expectations, consumption and investment

BSc in Economics

Luís Clemente-Casinhas

https://luisclementecasinhas.org/

ISCTE-IUL - Economics Department

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Consumption

- Consumption for a very foresighted consumer depends on total wealth:
 - Financial wealth: checking and savind accounts value.
 - Housing wealth: house owned value minus mortgage due.
 - Human wealth: after-tax labour income over working life.
- Consumption also depends on current income because:
 - Banks will not always lend money to those who want to consume more than their income.
 - The anticipation of future financial distress makes some people reluctant to borrow.
 - Low income people may prefer to postpone some consumption until later years, when their incomes are higher.

Investment

- Investment decisions depend on the present value of expected future profits:
 - For a machine bought in t and operational in t + 1, we have:

$$V\left(\Pi_{t}^{e}\right) = \frac{1}{1+r_{t}}\Pi_{t+1}^{e} + \frac{1}{(1+r_{t})(1+r_{t+1}^{e})}(1-\delta)\Pi_{t+2}^{e} + \dots$$

- If there are static expectations (convenient special case), we have:

$$V\left(\Pi_t^e\right) = \frac{1}{1+r_t}\Pi_t\left(1+\frac{1-\delta}{1+r_t}+\ldots\right) = \frac{1}{1+r_t}\frac{1+r_t}{r_t+\delta}\Pi_t = \frac{\Pi_t}{r_t+\delta}$$

where $(r_t + \delta)$ is rental cost (user cost), or shadow cost of capital.

Profit per unit of capital is an increasing function of the sales/output to capital stock ratio:

$$\Pi_t = \Pi\left(Y_t/K_t\right)$$



Consumption and investment

- Consumption is likely to respond less than one for one to fluctuations in current income.
 - If one concludes that the decrease in current income is transitory, consumption will be adjusted by less.
 - If the decrease in current income is permanent, consumption is likely to respond one-for-one with the permanent change.
- Similarities exist between consumption and investment behavior because the more transitory
 firms expect a current increase in sales to be, the less likely they are to acquire new capital (e.g.,
 new machines, factories, etc.).

References

• Blanchard, O. (2017). *Macroeconomics. Global Edition.* (7th ed.). Routledge.

