

Universitat de Barcelona
Academic year 2011-2012, Fall Semester
Macroeconomics - Group A8
Professor: Lorenzo Burlon

The market for goods and services and the IS curve.

List 5 - The IS curve.

1. Give an intuition of the points in the graph real interest rate - income that DO NOT lie on the IS curve.
2. Give the graphical representation of a decrease in the tax rate and of an increase in the marginal propensity to consume. Explain why these two changes have similar effects on the IS curve.
3. Suppose a closed economy with public sector is characterized as follows: $C = 5 + 0.4Y_d$, $I = 50 - 3i$, $t = 0.25$, $Tr = 0$, $G = 100$.
 - (a) Derive the equation describing the IS curve and its slope.
 - (b) Compute the equilibrium level on income, the consumption, the public savinds, and the multiplier of public spending when $i = 5$.
4. Consider a closed economy with public sector. The specifics of this economy are: $C = 0.8Y_d$, $I = 126 - 25i$, $t = 0.1$, $Tr = 50$, and $G = 43$.
 - (a) Derive the analytical expression of the IS curve and its slope.
 - (b) Compute the equilibrium level of income, consumption, public savings, and the multiplier of public spending when $i = 5$.
5. Consider a closed economy with public sector such that $C = 400 + 0.5Y_d$, $I = 700 - 25i$, $t = 0.1$, $Tr = 0$, and $G = 600$.
 - (a) Find the equation describing the IS curve and its slope.
 - (b) Compute the equilibrium level of income, consumption, public savings, and the multiplier of public spending when $i = 2$.
 - (c) Which is the level of public spending that makes the equilibrium income increase by 10%, given the same tax rate and the same interest rate?