Macroeconomics
Chapters 4 and 5 – Summary Exercise

Bachelor's Degrees in Management and in Finance and Accounting

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Chapters 4 and 5 – Summary Exercise

1. Obtain the analytical expression of the IS curve using:

   - $C = \bar{C} + cY_D - br \implies C = 2.6 + 0.6Y_D - 0.1r$
   - $I = \bar{I} - d(r + \bar{f}) \implies I = 2.4 - 0.2(r + 1)$
   - $NX = \bar{NX} - xr \implies NX = 2.6 - 0.1r$
   - $G = \bar{G} \implies G = 6$
   - $T = \bar{T} \implies T = 3$

2. Verify that the same result can be obtained using:

$$Y = m \times \bar{A} - m \times \phi \times r \Leftrightarrow$$

$$\Leftrightarrow Y = \frac{1}{1 - c} \times (\bar{C} + \bar{I} - c\bar{T} - d\bar{f} + \bar{G} + \bar{NX}) - \frac{1}{1 - c} \times (b + d + x) \times r$$

3. Represent the IS curve graphically.

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4. Consider the same information as before. Increase each component of $\bar{A}$ by **1 unit** (one at a time), while keeping the interest rate constant.

    a. Is the effect on Y the same as the initial change, higher or lower?

    b. Represent the changes graphically.

5. Obtain the AD curve using the following MP rule:

    – $r = \bar{r} + \lambda\pi \implies r = 1 + 0.5\pi$

6. Represent the AD curve graphically.

7. If you repeated question 4 using the AD curve, would the answer change?

8. What is the effect of increasing $\bar{r}$ by **1 unit** on Y, for each level of inflation (holding inflation constant)? Represent the change graphically.