

Seminar 1: Questions

1. Gross National Product is
 - a. Gross Domestic Product plus net factor income from abroad
 - b. Gross Domestic Product minus net factor income from abroad
 - c. Gross Domestic Product plus depreciation
 - d. Gross Domestic Product minus depreciation

(5 marks)

2. Net National Product is
 - a. Gross National Product plus net factor income from abroad
 - b. Gross National Product minus net factor income from abroad
 - c. Gross National Product plus depreciation
 - d. Gross National Product minus depreciation

(5 marks)

3. National Income is
 - a. Net National Product plus net factor income from abroad
 - b. Net National Product minus net factor income from abroad
 - c. Net National Product plus indirect business taxes
 - d. Net National Product minus indirect business taxes

(5 marks)

4. ABC Computer Company has a \$20,000,000 factory in Silicon Valley. During the current year ABC builds \$2,000,000 worth of computer components. ABC's costs are labor, \$1,000,000; interest on debt, \$100,000; and taxes, \$200,000.
ABC sells all its output to XYZ Supercomputer. Using ABC's components, XYZ builds 4 super computers at a cost of \$800,000 each (\$500,000 worth of components, \$200,000 in labor costs, and \$100,000 in taxes per computer.) XYZ has a \$30,000,000 factory.
XYZ sells three of the supercomputers for \$1,000,000 each. At year's end, it had not sold the fourth. The unsold computer is carried on XYZ's books as an \$800,000 increase in inventory.
Calculate GDP using the expenditure method, the product method and the income method, showing that all three approaches give the same answer.

(30 marks)

For questions 5 - 6 you are given the following information about an economy:

- Gross private domestic investment = 40
- Government purchases of goods and services = 30
- Gross National Product (GNP) = 200
- Net exports (exports – imports) = -18
- Taxes = 60
- Government transfer payments to domestic private sector = 25
- Interest payments from the government to the domestic private sector = 15 (assume all interest payments by the government go to domestic households)
- Factor income received from the rest of the world = 7
- Factor income paid to rest of world = 9
- Government investment = 0

5. Calculate aggregate consumption

(20 marks)

6. Calculate GDP.

(10 marks)

For questions 7-8 consider a closed economy (an economy that does not export or import) in which (in all periods) private consumption is equal to 60% of GDP, private investment is equal to 20% of GDP, and government purchases of goods and services is equal to 20% of GDP. Price indices for consumption, investment and government spending are all set equal to 1 in year 1 (the 'base year'). In year two the consumption price index rises to 1.04, the investment price index rises to 1.01 and the government spending price index rises to 1.02.

7. Calculate CPI inflation between years 1 and 2.

(5 marks)

8. Calculate the inflation rate of the GDP deflator between years 1 and 2.

(10 marks)

9. Suppose that real GDP is growing constantly at 2% per annum. If (the index value of) real GDP is equal to 1 in year 1 (the base year), what will the index be equal to in year 10?

- a. 1.020
- b. 1.195
- c. 1.200
- d. 1.219

(10 marks)

Questions for discussion. (Prepare brief comments.)

- A. Discuss the appropriate choice of weights for the constituent components within the GDP deflator when expenditure shares are changing.
- B. Should real GDP be the principal measure of an economy's economic performance?