

Remarks on Depreciation

Text pp.37-38. Depreciation is the value of the capital that wears out during the period over economic activity is being measured, In the calculation of the components of national income (such as corporate profits and investment income) depreciation is subtracted from total, or gross, income.

Reason to use GDP rather than NDP: difficulty of calculating the market value of depreciation. Example ... a firm buys a machine with \$ 100. 5 years later, the firm sells that with \$ 10. In calculating annual (or quarterly) GDP, how do you measure depreciation per year (or per quarter?)

Numerical Example in pp.26-27 (Handout p.6) Continued

Add the following information:

$TR + INT$	8000
NFP	0
I	0
NX	0
T	7000
C	40000
Y	50000

Remarks: (1) T =sum of 'tax paid' by both companies. (2) We derived $Y = 50000$ before. (3) By (2.3), $G = (a)$

$$\begin{aligned}
 Y &= 50000 \\
 &= \text{wage} + \text{corporate profit} + \text{tax (total income)} \\
 &= \text{private disposable income} + \text{net government income ((2.4) and (2.5))}
 \end{aligned}$$

$$\begin{aligned}
 \text{private disposable income} &= Y + NFP + TR + INT - T \\
 &= 50000 + 8000 - 7000 = 51000.
 \end{aligned}$$

$$\begin{aligned}
 \text{net government income} &= T - TR - INT \\
 &= 7000 - 8000 = -1000.
 \end{aligned}$$

$$S_{pvt} = 51000 - C = 11000, \quad S_{gov} = -1000 - G = -11000.$$

Hence $S = 0$, which, in fact, is a consequence of $I = NX = NFP = 0$, as we will see later.

Let $NX = -5000$, other things being equal. Which value(s) is subject to change?