

Useful Macroeconomics

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Suggested Learning Activities after Chapter 4

New terms to Explain: *behavioral equation, equilibrium, hypothesis, identity equation, negative feedback loop, and positive feedback loop.*

Discussion

1. Describe what you found most interesting about the 1950s in this chapter.
2. Describe the workweek pattern during the 1930s, 1940s, and 1950s.
3. Explain the difference between the *normal* workweek utilization and the workweek utilization.
4. Describe the interdependence of the Supply Side sub-models.
5. What key variables are determined inside the Production & Sales sub-model?
6. Explain the *customer demand* hypothesis for desired production.
7. Explain the *inventory demand* hypothesis for desired production.
8. Review your answer to Activity #10 for chapter 3. Clarify your explanation that the expenditure method of measuring GDP is consistent with: **$GDP - AD = \Delta inventories$** .
9. Why are percentages and indexes divided by 100 in equations?
10. If workweek utilization is the ratio of desired production to production capacity, *what's the numerator and what's the denominator in that ratio?*
11. Explain in your own words what it means to *test the customer demand hypothesis* without the inventory demand hypothesis. How could that be done?
12. Explain the difference between correlation and causation.
13. Explain the concept of 'desired inventory duration.'
14. Review your answer to Activity #14 after chapter 3. Try to clarify your explanation about how Δ inventories depends on whether GDP or AD is larger.
15. In your own words, explain the take-away message of the test results in Figure 4.9.
16. In your own words, explain how a negative feedback loop works like a thermostat.
17. Use what you learned in chapter 3 to write the equation for *real AD* in the PS sub-model.

Modeling

18. Build the Production & Sales sub-model displayed in Figure 4.8, using the equations and explanation provided in section 4.4, and these values:

$DS \text{ nominal } AD = 6 + \text{STEP}(0,2)$ {where 6 means \$6 trillion/year}

$WP \text{ price index} = 60$

$Inventories \text{ initial value} = (2/12) * 10$ {where 10 means \$10 trillion/year}

$production \text{ capacity} = 12.5$ {where 12.5 means \$12.5 trillion/year}

Put *real GDP* and *real AD* on the same graph and simulate for 10 years.

You should get flat lines on the graph, where $GDP = AD$. Work on it until you do.

Repeat the simulation experiment with **$DS \text{ nominal } AD = 6 + \text{STEP}(1,2)$**

Explain why the simulation results differ from the first experiment.