

Assignment 10 - Inventory/Workforce Oscillations and the Origin of Business Cycles

Preparing for the Task

Read sections 19.1 and 19.2 of *Business Dynamics*, but just skim or skip sections 19.2.4, 19.2.5, and 19.2.6. The public sector implications are contained in 19.3.

The Model

You will be using the Widgets1.mdl model stored on the CD that comes with *Business Dynamics*. (You can also download Widgets1.mdl from the class web site.)

The Task

Hand in complete answers to the Challenges in Sterman's *Business Dynamics* given in Chapter 19, pages 767-771 and 773-774, as follows.

Explaining Oscillations (p. 767-771)

- Answer Sterman's questions.
- In your answer to questions in the paragraph at the top of 771, try to identify one or more major balancing loops that appear to be responsible for the oscillations you describe. (Note that some loops include elements from both the Inventory sector and the Labor Vacancy sector.)

Policy Design to Enhance Stability (p. 773-774).

- Answer Sterman's questions.
- Sterman asks you to write down what you think will happen before you simulate. Do that. Report those thoughts honestly (no deductions for guessing wrong!) -- learning comes from reflecting on the differences between prior thoughts and actual simulations.
- The "policies" Sterman is referring to on the top of p. 774 are policies designed to help the system be more stable.