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*Application: Consumption Smoothing in the Second Millennium B.C.*

An early anecdote concerning the consumption-smoothing behavior underlying this chapter's model comes from the story of Joseph in the Book of Genesis. Scholars of the biblical period place the episode somewhere around 1800 B.C.

The Pharaoh of Egypt summoned Joseph, then an imprisoned slave, to interpret two dreams. In the first, seven plump cattle were followed and devoured by seven

lean, starving cattle. In the second, seven full ears of corn were eaten by seven thin ears. After hearing these dreams, Joseph prophesied that Egypt would enjoy seven years of prosperity, followed by seven of famine. He recommended a consumption-smoothing strategy to provide for the years of famine, under which Pharaoh would appropriate and store a fifth of the grain produced during the years of plenty (Genesis 41:33–36). According to the Bible, Pharaoh embraced this plan, made Joseph his prime minister, and thereby enabled Joseph to save Egypt from starvation.

Why did Joseph recommend storing the grain (a form of domestic investment yielding a rate of return of zero before depreciation) rather than lending it abroad at a positive rate of interest? Cuneiform records of the period place the interest rate on loans of grain in Babylonia in a range of 20 to 33 percent per year and show clear evidence of international credit transactions within Asia Minor (Heichelheim 1958, pp. 134–135). At such high interest rates Egypt could have earned a handsome return on its savings. It seems likely, however, that, under the military and political conditions of the second millennium B.C., Egypt would have found it difficult to compel foreign countries to repay a large loan, particularly during a domestic famine. Thus storing the grain at home was a much safer course. The model in this chapter assumes, of course, that international loan contracts are always respected, but we have not yet examined mechanisms that ensure compliance with their terms.

We will study the question in Chapter 6. ■

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