The Financial System: Markets, Intermediaries, and the Crisis of 2008–2009

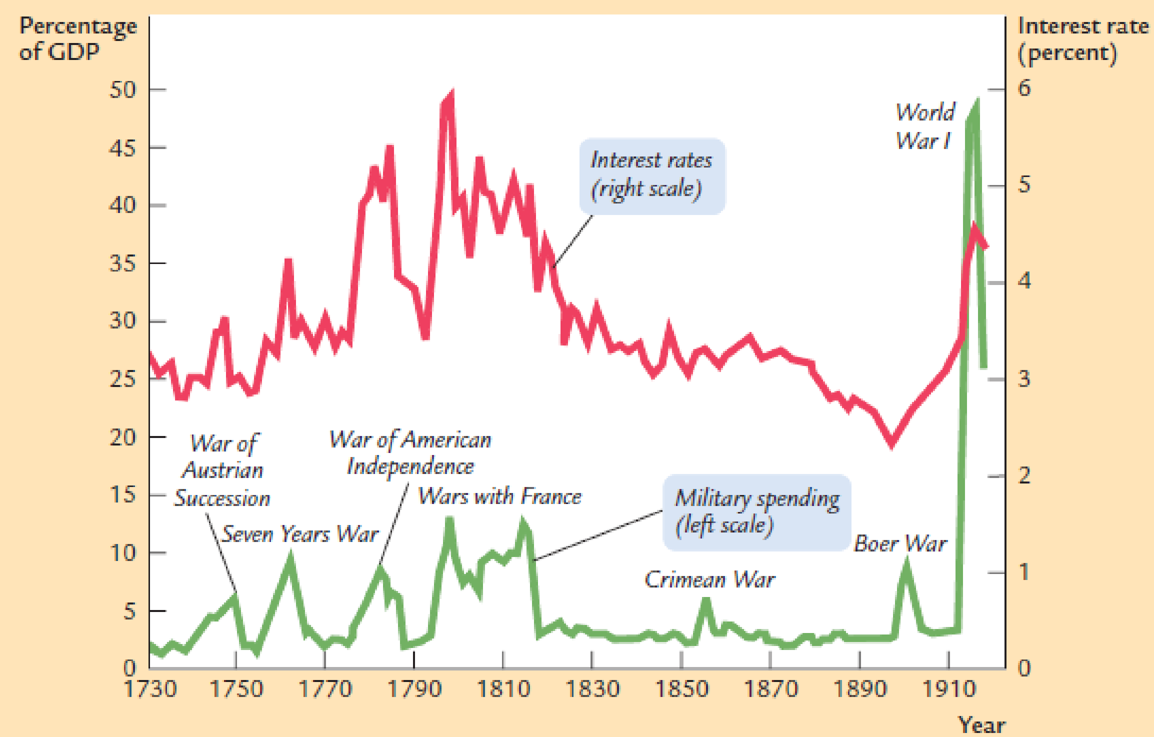
- The model presented in this chapter represents the economy's financial system with a single market. Those who have some income they don't want to consume immediately bring their saving to this market.
- Those who have investment projects they want to undertake finance them by borrowing in this market. The interest rate adjusts to bring saving and investment into balance.
- The actual financial system is a bit more complicated than this description. As in this model, the goal of the system is to channel resources from savers into various forms of investment. But the system includes a large variety of mechanisms to facilitate this transfer of resources. (PONZI GAME)
- One piece of the financial system is the set of *financial markets* through which households can directly provide resources for investment. Two important financial markets are the market for *bonds* and the market for *stocks*. A person who buys a bond from, say, Apple Corporation becomes a creditor of the company, while a person who buys newly issued stock from Apple becomes a part owner of the company. (A purchase of stock on a stock exchange, however, represents a transfer of ownership shares from one person to another and does not provide new funds for investment projects.)
- Raising investment funds by issuing bonds is called *debt finance*, and raising funds by issuing stock is called *equity finance*.
- Another piece of the financial system is the set of *financial intermediaries* through which households can indirectly provide resources for investment. As the term suggests, a financial intermediary stands between the two sides of the market and helps direct financial resources toward their best use.

- Banks are the best-known type of financial intermediary.
- They take deposits from savers and use these deposits to make loans to those who have investments to make. Other examples of financial intermediaries include mutual funds, pension funds, and insurance companies. Unlike in financial markets, when a financial intermediary is involved, the saver is often unaware of the investments that his saving is financing.
- In 2008 and 2009, the world financial system experienced a historic crisis. Many banks and other financial intermediaries had previously made loans to homeowners, called *mortgages,* and had purchased many mortgage-backed securities (financial instruments whose value derives from a pool of mortgages).
- A large decline in housing prices throughout the United States, however, caused many homeowners to default on their mortgages, which in turn led to large losses at these financial institutions. Many banks and other financial intermediaries found themselves nearly bankrupt, and the financial system started having trouble performing its key functions.
- To address the problem, the U.S. Congress in October 2008 authorized the U.S. Treasury to spend $700 billion, which was largely used to put further resources into the banking system.

➢ Wars and the Interest Rate in U.K. : 1730 - 1920

- Because the economic changes accompanying them are often large, wars provide a natural experiment with which economists can test their theories. We can learn about the economy by seeing how in wartime the endogenous variables respond to the major changes in the exogenous variables.

- One exogenous variable that changes substantially in wartime is the level of government purchases. The below figure shows military spending as a percentage of GDP for the United Kingdom from 1730 to 1919.



Military Spending and the Interest Rate in the United Kingdom This figure shows military spending as a percentage of GDP in the United Kingdom from 1730 to 1919. Not surprisingly, military spending rose substantially during each of the eight wars of this period. This figure also shows that the interest rate tended to rise when military spending rose.

Source: Series constructed from various sources described in Robert J. Barro, "Government Spending, Interest Rates, Prices, and Budget Deficits in the United Kingdom, 1701–1918," *Journal of Monetary Economics* 20 (September 1987): 221–248.

- This graph shows, as one would expect, that government purchases rose suddenly and dramatically during the eight wars of this period.
- Our model predicts that this wartime increase in government purchases—and the increase in government borrowing to finance the wars—should have raised the demand for goods and services, and raised the interest rate.

- To test this prediction, the above figure also shows the interest rate on long-term government bonds, called *consols* in the United Kingdom.
- A positive association between military purchases and interest rates is apparent in this figure. These data support the model's prediction: interest rates do tend to rise when government purchases increase.
- One problem with using wars to test theories is that many economic changes may be occurring at the same time. For example, in World War II, while government purchases increased dramatically, rationing also restricted consumption of many goods. In addition, the risk of defeat in the war and default by the government on its debt presumably increases the interest rate the government must pay.
- Economic models predict what happens when one exogenous variable changes and all the other exogenous variables remain constant. In the real world, however, many exogenous variables may change at once. Unlike controlled laboratory experiments, the natural experiments on which economists must rely are not always easy to interpret.