8

Financial Markets

Key Words: Time consistency; information asymmetry.

Big Ideas:

- Effective financial markets require strong institutional support.
- Good institutions deal with information asymmetries and time consistency issues.

Some of the most important markets for aggregate economic performance are those for labor and (financial) capital, which affect every industry and product. Countries differ markedly in their treatment of both markets, with (evidently) different outcomes as a result.

Our focus here is on financial markets, which are, perhaps, the most difficult markets to manage effectively.

8.1 Features of effective financial markets

Financial markets are central to economic performance, because they facilitate (if they work well) the allocation of resources to the most-productive firms. In the US today, some firms borrow from banks, others issue bonds and equity in capital markets, and still others raise money through venture capitalists. Countries differ widely in how they do this, but they all have ways of channeling funds from households (savers) to firms (borrowers).

The primary issue with financial markets is information, and we know that markets sometimes handle information poorly. Here, investors need to understand the risks faced by borrowers, but borrowers typically know more about themselves than others do. A bank, for example, needs to know enough about its borrowers to assess the risk of default, and its depositors need to know enough about the bank's ability to do this well to assess the risk to their deposits. A bank (or other financial institution) is, therefore, in the information business: Its goal is to process information efficiently so that it can assess and manage risk.

None of this is easy to do. All of these financial arrangements require institutional support. An effective financial system requires some version of:

- Creditor protection. If A lends money to B, it's essential that A's claim be honored. That requires a legal system that makes the creditor's rights clear and enforces them if necessary. (You might think about "property rights" and the "rule of law" about now.) Without this, people will either not make loans or will make loans only to friends and relatives. Weak, ineffective financial systems follow naturally when creditors are not protected, and economic performance suffers as a result.
- Corporate governance. The laws of most countries give creditors some say over the management of firms. Equity investors, for example, are represented (in principle) by boards of directors. There's endless debate about how best to do this, but there's no question that doing it well is important.
- **Disclosure.** When people invest in securities, they need to understand what they're buying. In most countries with active securities markets, the law dictates disclosure of relevant financial information. Again, some countries do this better than others.
- Central banks. Most countries have central banks. If run well, they play an important role in the economy, particularly as lenders of last resort during financial crises.

Measures of these things are available from a number of sources, including the World Bank's Doing Business website, particularly the categories Getting Credit and Protecting Investors.

8.2 Financial regulation and crises

From the perspective of a country, one of the challenges of managing financial markets is that they can cause enormous collateral damage if something goes wrong. If a farmer goes bankrupt, you buy milk from someone else. But if a large financial institution goes under, it can slow down the whole economy. The question is how to manage financial markets to get the benefits of a thriving financial system with the least risk.

No one yet has come up with a perfect answer. An unregulated financial system may work well most of the time, but will experience occasional crises. A more tightly regulated system may (it's not a sure thing) have lower crisis risk, but the regulation may distort the allocation of capital. Most approaches to financial regulation face a tradeoff of this sort.

Consider deposit insurance. In the US, bank panics were a common occurrence up through the 1930s. During the Depression, thousands of banks went under. Some of them were insolvent. Others closed because depositors demanded their money back for fear that the bank would go under: what we call bank runs. It's a consequence, in part, of people having imperfect information about the bank's soundness.

The solution — or, rather, one solution — was to provide deposit insurance. Milton Friedman and Anna Schwartz called federal deposit insurance "the most important structural change" made in the 1930s to deal with bank runs. And it worked — bank runs pretty much ended.

But like many solutions, it raised new problems. The problem with deposit insurance is what economists call "moral hazard" and others might call the "other people's money" problem. Since depositors don't face the risk of losing their money, banks don't face the risk of withdrawal, and they have less reason to control the risk of their investments. Or to put it differently, their borrowing costs don't reflect the risk of their loan portfolios. So they take excessive risk, which is hardly what we're looking for. Therefore, we add to deposit insurance some regulatory oversight intended to limit banks' ability to take risks. We know from bitter experience that it's hard to get this right, and we're still trying.

A related challenge is the "too big to fail" dilemma, a classic version of the time-consistency problem discussed in Chapter 6. Policymakers insist that they will never bail out failing banks, but everyone knows in advance that a failed behemoth can topple the financial system (think Lehman or AIG). So the promise lacks credibility: a future policymaker is likely to bail them out anyway. Investors know this, and reward the largest intermediaries with low funding costs, thereby subsidizing excessive risk taking.

Executive summary

- 1. Financial markets work best when based on effective institutions.
- 2. It's hard to get that exactly right.

If you're looking for more

The logic and operation of financial institutions is a huge subject in its own right. Among the courses we have on the topic are Professor Schoenholtz's "Money and Banking," course ECON-GB.2333, and "Financial Crisis and Policy," course ECON-GB.2343. Or see his book: Stephen Cecchetti and Kermit Schoenholtz, *Money, Banking and Financial Markets*; or visit their blog at http://www.moneyandbanking.com. Ben Bernanke's testimony to Congress (search "Bernanke testimony") is a wonderful overview of financial regulation and the 2008 crisis. He also did a series of lectures that are posted on the Fed's website.

Beyond that, financial crises make good reading, and there's no shortage of good books on the subject. One of the best reads is Edward Chancellor's *Devil Take the Hindmost*, a history of financial speculation. On the most recent crisis, we enjoyed David Wessel's *In Fed We Trust* and Andrew Ross Sorkin's *Too Big to Fail*.

Index

average product of labor, see labor

excess burden, see tax

expected inflation, see inflation

	identities
Bernanke, Ben, 108	recitoretos
bond, 105	financial markets, 105
budget deficit, see	financial regulation, 106
government budget	fixed exchange rate, see
	exchange rate regime
capital controls, see	fixed-basket approach, see
exchange rate regimes	price index
central bank, 106	fixed-weight approach, see
Cobb-Douglas, see	price index
production function	flexible exchange rate, see
coincident indicator, see	exchange rate regime
cyclical indicators	floating exchange rate, see
consumer price index (CPI), see	exchange rate regime
price index	Friedman, Milton, 107
convergence, see Solow model	
convertibility, see	GDP, see gross domestic product
exchange rate regime	GDP deflator, see price index
corporate governance, 106	government deficit, see
countercyclical, see business cycle	government budget
covered interest parity, see	government purchases, see gross do-
interest rate parity	mestic product (GDP)
credit easing, see monetary policy	government saving, see saving
credit risk	
default risk, 106	income identity of GDP, see
creditor protection, 106	identities
	inflation target, see monetary policy
debt, see government debt	inflation targeting, see
default risk, see credit risk	monetary policy
deflator, see price index	interest-rate rules, see
deposit insurance, 107	monetary policy
depreciation, see exchange rate	investment, see gross
disclosure, 106	domestic product (GDP)

expenditure identity of GDP, see

job creation rate, see labor

job destruction rate, see labor

job reallocation rate, see labor job turnover rate, see labor

labor market, see labor
labor market equilibrium, see labor
lagging indicator, see
cyclical indicators
leading indicator, see
cyclical indicators
long-run aggregate supply, see
aggregate supply
long-term interest rate, see
interest rate

managed float, see exchange rate regime money supply, see monetary policy moral hazard, 107

net exports, see gross domestic product (GDP) nominal GDP, see gross domestic product nominal interest rate, see interest rate

off-balance-sheet liabilities, see hidden liabilities open-market operation, see monetary policy

partial derivative, see derivative participation rate, see labor pegged exchange rate, see exchange rate regime per capita GDP, see gross domestic product physical capital, see capital policy discretion, see monetary policy duration commitment, see monetary policy PPP, see purchasing power parity primary deficit, see

government budget

public debt, see government debt

private saving, see saving procyclical, see business cycle

 $\begin{array}{c} \text{quantitative easing, } see \\ \text{monetary policy} \end{array}$

real GDP, see gross domestic product (GDP)
real interest rate, see interest rate
rules vs discretion, see
monetary policy

short-run aggregate supply, see aggregate supply
short-term interest rate, see
interest rate
sovereign debt, see government debt
speculative attack, see
exchange rate regime
steady-state unemployment rate, see
labor
supply of labor, see labor

sustainability, see government debt

Taylor rule, see monetary policy term structure of interest rates, see interest rate time consistency, 107 too big to fail, 107 total factor productivity, see productivity

Treasury bill, see Treasury trilemma of open-economy monetary policy, see exchange-rate regime

uncovered interest parity, see interest rate parity unemployment dynamics, see labor unemployment rate, see labor unsustainable, see government debt

value-added tax (VAT), see tax

welfare loss, $see~{\rm tax}$ worker reallocation rate, $see~{\rm labor}$

yield, see bond

zero lower bound, see monetary policy