## 17.1 How Businesses Raise Financial Capital

### Learning Objectives

By the end of this section, you will be able to:

* Describe financial capital and how it relates to profits
* Discuss the purpose and process of borrowing, bonds, and corporate stock
* Explain how firms choose between sources of financial capital

Firms often make decisions that involve spending money in the present and expecting to earn profits in the future. Examples include when a firm buys a machine that will last 10 years, or builds a new plant that will last for 30 years, or starts a research and development project. Firms can raise the financial capital they need to pay for such projects in four main ways: (1) from early-stage investors; (2) by reinvesting profits; (3) by borrowing through banks or bonds; and (4) by selling stock. When business owners choose financial capital sources, they also choose how to pay for them.

### Early-Stage Financial Capital

Firms that are just beginning often have an idea or a prototype for a product or service to sell, but few customers, or even no customers at all, and thus are not earning profits. Such firms face a difficult problem when it comes to raising financial capital: How can a firm that has not yet demonstrated any ability to earn profits pay a rate of return to financial investors?

For many small businesses, the original source of money is the business owner. Someone who decides to start a restaurant or a gas station, for instance, might cover the startup costs by dipping into their own bank account, or by borrowing money (perhaps using a home as collateral). Alternatively, many cities have a network of well-to-do individuals, known as “angel investors,” who will put their own money into small new companies at an early development stage, in exchange for owning some portion of the firm.

Venture capital firms make financial investments in new companies that are still relatively small in size, but that have potential to grow substantially. These firms gather money from a variety of individual or institutional investors, including banks, institutions like college endowments, insurance companies that hold financial reserves, and corporate pension funds. Venture capital firms do more than just supply money to small startups. They also provide advice on potential products, customers, and key employees. Typically, a venture capital fund invests in a number of firms, and then investors in that fund receive returns according to how the fund as a whole performs.

The amount of money invested in venture capital fluctuates substantially from year to year: as one example, venture capital firms invested more than $48.3 billion in 2014, according to the National Venture Capital Association. All early-stage investors realize that the majority of small startup businesses will never hit it big; many of them will go out of business within a few months or years. They also know that getting in on the ground floor of a few huge successes like a Netflix or an Amazon.com can make up for multiple failures. Therefore, early-stage investors are willing to take large risks in order to position themselves to gain substantial returns on their investment.

### Profits as a Source of Financial Capital

If firms are earning profits (their revenues are greater than costs), they can choose to reinvest some of these profits in equipment, structures, and research and development. For many established companies, reinvesting their own profits is one primary source of financial capital. Companies and firms just getting started may have numerous attractive investment opportunities, but few current profits to invest. Even large firms can experience a year or two of earning low profits or even suffering losses, but unless the firm can find a steady and reliable financial capital source so that it can continue making real investments in tough times, the firm may not survive until better times arrive. Firms often need to find financial capital sources other than profits.

### Borrowing: Banks and Bonds

When a firm has a record of at least earning significant revenues, and better still of earning profits, the firm can make a credible promise to pay interest, and so it becomes possible for the firm to borrow money. Firms have two main borrowing methods: banks and bonds.

A bank loan for a firm works in much the same way as a loan for an individual who is buying a car or a house. The firm borrows an amount of money and then promises to repay it, including some rate of interest, over a predetermined period of time. If the firm fails to make its loan payments, the bank (or banks) can often take the firm to court and require it to sell its buildings or equipment to make the loan payments.

Another source of financial capital is a bond. A bond is a financial contract: a borrower agrees to repay the amount that it borrowed and also an interest rate over a period of time in the future. A corporate bond is issued by firms, but bonds are also issued by various levels of government. For example, a municipal bond is issued by cities, a state bond by U.S. states, and a Treasury bond by the federal government through the U.S. Department of the Treasury. A bond specifies an amount that one will borrow, the interest rate that one will pay, and the time until repayment.

A large company, for example, might issue bonds for $10 million. The firm promises to make interest payments at an annual rate of 8%, or $800,000 per year and then, after 10 years, will repay the $10 million it originally borrowed. When a firm issues bonds, it may choose to issue many bonds in smaller amounts that together reach the total amount it wishes to raise. A firm that seeks to borrow $50 million by issuing bonds, might actually issue 10,000 bonds of $5,000 each. In this way, an individual investor could, in effect, loan the firm $5,000, or any multiple of that amount. Anyone who owns a bond and receives the interest payments is called a bondholder. If a firm issues bonds and fails to make the promised interest payments, the bondholders can take the firm to court and require it to pay, even if the firm needs to raise the money by selling buildings or equipment. However, there is no guarantee the firm will have sufficient assets to pay off the bonds. The bondholders may recoup only a portion of what they loaned the firm.

Bank borrowing is more customized than issuing bonds, so it often works better for relatively small firms. The bank can get to know the firm extremely well—often because the bank can monitor sales and expenses quite accurately by looking at deposits and withdrawals. Relatively large and well-known firms often issue bonds instead. They use bonds to raise new financial capital that pays for investments, or to raise capital to pay off old bonds, or to buy other firms. However, the idea that firms or individuals use banks for relatively smaller loans and bonds for larger loans is not an ironclad rule: sometimes groups of banks make large loans and sometimes relatively small and lesser-known firms issue bonds.

### Corporate Stock and Public Firms

A corporation is a business that “incorporates”—that is owned by shareholders that have limited liability for the company's debt but share in its profits (and losses). Corporations may be private or public, and may or may not have publicly traded stock. They may raise funds to finance their operations or new investments by raising capital through selling stock or issuing bonds.

Those who buy the stock become the firm's owners, or shareholders. Stock represents firm ownership; that is, a person who owns 100% of a company’s stock, by definition, owns the entire company. The company's stock is divided into shares. Corporate giants like IBM, AT&T, Ford, General Electric, Microsoft, Merck, and Exxon all have millions of stock shares. In most large and well-known firms, no individual owns a majority of the stock shares. Instead, large numbers of shareholders—even those who hold thousands of shares—each have only a small slice of the firm's overall ownership.

When a large number of shareholders own a company, there are three questions to ask:

1. How and when does the company obtain money from its sale of stock?
2. What rate of return does the company promise to pay when it sells stock?
3. Who makes decisions in a company owned by a large number of shareholders?

First, a firm receives money from the stock sale only when the company sells its own stock to the public (the public includes individuals, mutual funds, insurance companies, and pension funds). We call a firm’s first stock sale to the public an initial public offering (IPO). The IPO is important for two reasons. For one, the IPO, and any stock issued thereafter, such as stock held as treasury stock (shares that a company keeps in their own treasury) or new stock issued later as a secondary offering, provides the funds to repay the early-stage investors, like the angel investors and the venture capital firms. A venture capital firm may have a 40% ownership in the firm. When the firm sells stock, the venture capital firm sells its part ownership of the firm to the public. A second reason for the importance of the IPO is that it provides the established company with financial capital for substantially expanding its operations.

However, most of the time when one buys and sells corporate stock the firm receives no financial return at all. If you buy General Motors stock, you almost certainly buy it from the current share owner, and General Motors does not receive any of your money. This pattern should not seem particularly odd. After all, if you buy a house, the current owner receives your money, not the original house builder. Similarly, when you buy stock shares, you are buying a small slice of the firm's ownership from the existing owner—and the firm that originally issued the stock is not a part of this transaction.

Second, when a firm decides to issue stock, it must recognize that investors will expect to receive a rate of return. That rate of return can come in two forms. A firm can make a direct payment to its shareholders, called a dividend. Alternatively, a financial investor might buy a share of stock in Wal-Mart for $45 and then later sell it to someone else for $60, for $15 gain. We call the increase in the stock value (or of any asset) between when one buys and sells it a capital gain.

Third: Who makes the decisions about when a firm will issue stock, or pay dividends, or re-invest profits? To understand the answers to these questions, it is useful to separate firms into two groups: private and public.

A private company is frequently owned by the people who generally run it on a day-to-day basis. Individuals can run a private company. We call this a sole proprietorship. If a group runs it, we call it a partnership. A private company can also be a corporation, but with no publicly issued stock. A small law firm run by one person, even if it employs some other lawyers, would be a sole proprietorship. Partners may jointly own a larger law firm. Most private companies are relatively small, but there are some large private corporations, with tens of billions of dollars in annual sales, that do not have publicly issued stock, such as farm products dealer Cargill, the Mars candy company, and the Bechtel engineering and construction firm.

When a firm decides to sell stock, which financial investors can buy and sell, we call it a public company. Shareholders own a public company. Since the shareholders are a very broad group, often consisting of thousands or even millions of investors, the shareholders vote for a board of directors, who in turn hire top executives to run the firm on a day-to-day basis. The more stock a shareholder owns, the more votes that shareholder is entitled to cast for the company’s board of directors.

In theory, the board of directors helps to ensure that the firm runs in the interests of the true owners—the shareholders. However, the top executives who run the firm have a strong voice in choosing the candidates who will serve on their board of directors. After all, few shareholders are knowledgeable enough or have enough personal incentive to spend energy and money nominating alternative board members.

### How Firms Choose between Financial Capital Sources

There are clear patterns in how businesses raise financial capital. We can explain these patterns in terms of imperfect information, which as we discussed in [Information, Risk, and Insurance](http://openstax.org/books/principles-microeconomics-3e/pages/16-introduction-to-information-risk-and-insurance), is a situation where buyers and sellers in a market do not both have full and equal information. Those who are actually running a firm will almost always have more information about whether the firm is likely to earn profits in the future than outside investors who provide financial capital.

Any young startup firm is a risk. Some startup firms are only a little more than an idea on paper. The firm’s founders inevitably have better information than anyone else about how hard they are willing to work, and whether the firm is likely to succeed. When the founders invested their own money into the firm, they demonstrate a belief in its prospects. At this early stage, angel investors and venture capitalists try to overcome the imperfect information, at least in part, by knowing the managers and their business plan personally and by giving them advice.

Accurate information is sometimes not available because corporate governance, the name economists give to the institutions that are supposed to watch over top executives, fails, as the following Clear It Up feature on Lehman Brothers shows.

Clear It Up

How did lack of corporate governance lead to the Lehman Brothers failure?

In 2008, Lehman Brothers was the fourth largest U.S. investment bank, with 25,000 employees. The firm had been in business for 164 years. On September 15, 2008, Lehman Brothers filed for Chapter 11 bankruptcy protection. There are many causes of the Lehman Brothers failure. One area of apparent failure was the lack of oversight by the Board of Directors to keep managers from undertaking excessive risk. We can attribute part of the oversight failure, according to Tim Geithner’s April 10, 2010, testimony to Congress, to the Executive Compensation Committee’s emphasis on short-term gains without enough consideration of the risks. In addition, according to the court examiner’s report, the Lehman Brother’s Board of Directors paid too little attention to the details of the operations of Lehman Brothers and also had limited financial service experience.

The board of directors, elected by the shareholders, is supposed to be the first line of corporate governance and oversight for top executives. A second institution of corporate governance is the auditing firm the company hires to review the company's financial records and certify that everything looks reasonable. A third institution of corporate governance is outside investors, especially large shareholders like those who invest large mutual funds or pension funds. In the case of Lehman Brothers, corporate governance failed to provide investors with accurate financial information about the firm’s operations.

As a firm becomes at least somewhat established and its strategy appears likely to lead to profits in the near future, knowing the individual managers and their business plans on a personal basis becomes less important, because information has become more widely available regarding the company’s products, revenues, costs, and profits. As a result, other outside investors who do not know the managers personally, like bondholders and shareholders, are more willing to provide financial capital to the firm.

At this point, a firm must often choose how to access financial capital. It may choose to borrow from a bank, issue bonds, or issue stock. The great disadvantage of borrowing money from a bank or issuing bonds is that the firm commits to scheduled interest payments, whether or not it has sufficient income. The great advantage of borrowing money is that the firm maintains control of its operations and is not subject to shareholders. Issuing stock involves selling off company ownership to the public and becoming responsible to a board of directors and the shareholders.

The benefit of issuing stock is that a small and growing firm increases its visibility in the financial markets and can access large amounts of financial capital for expansion, without worrying about repaying this money. If the firm is successful and profitable, the board of directors will need to decide upon a dividend payout or how to reinvest profits to further grow the company. Issuing and placing stock is expensive, requires the expertise of investment bankers and attorneys, and entails compliance with reporting requirements to shareholders and government agencies, such as the federal Securities and Exchange Commission (SEC).