

PART

DIRECT INVESTING

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Overview

Financial markets offer you two basic investment choices: debt or equity. You can lend money to a government or company for some amount of time, or you can buy at least a share of companies and hard assets.

Debt represents a promise to pay. A borrower is required to make interest payments, if any, according to a schedule that's set when the loan is made. The borrower eventually has to repay the full amount and possibly a little extra.

Equity means full or partial ownership. Entire companies are bought and sold in the stock market along with their shares. Gold, other commodities, and real estate change hands through markets as well.

Debt payments and equity investments vary from one market to the next, as you'll find out later. What's constant is that governments, companies, and producers of hard assets play a role in these markets

directly. They are more than names that are attached to contracts.

Financial markets enable borrowers to find lenders and equity owners to locate investors. This first takes place in what's known as the primary market, where new securities and assets are sold.

Borrowers usually rely on competitive auctions for fundraising, though some sales are negotiated. Companies can sell stock publicly for the first time in initial public offerings (IPOs). They can sell additional shares as needed.

Commodity markets that focus on the buying and selling of raw materials, rather than derivative contracts, can be labeled primary markets. In real estate, marketplaces for new buildings can be described the same way.

In secondary markets, investors trade with each other rather than governments, companies, and owners of hard assets. Most buying and selling happens in

KEY POINT:

Governments and companies raise money from investors in primary markets. Investors buy from and sell to each other in secondary markets.

KEY POINT:

There are three main approaches to market analysis. Fundamentals provide insight into a government, company or hard asset. Technicals reflect a security's price moves. Quantitative analysis relies on data.

these markets if only because they tend to be far bigger than primary markets.

The longer the life of a security or asset, the greater the role of secondary trading. Debt maturing in a few months is less likely to change hands than a security with years left until it comes due. Equity has no maturity date by definition. Gold and other commodities can be stored indefinitely. Buildings typically last for decades, and land is eternal.

Investors who own a security or hard asset are said to have a long position. The holding becomes more valuable as the price increases. The opposite is a short position, established by selling a security or asset borrowed from another investor. Anyone with a short position stands to gain when the price drops, and vice versa.

Three basic types of analysis help investors decide whether to go long or short. Some investors rely on one type, and others combine them in search of investments most likely to rise or fall.

1. **Fundamental analysis** focuses on the prospects for governments, companies, or hard assets. The analysis can take what's known as a top-down or a bottom-up approach. Top-down analysis begins by looking at overall economic and business

conditions. Bottom-up analysis begins by considering the outlook for a specific government, company, or asset.

2. **Technical analysis** is the study of prices and other data to determine trading patterns. If a chart shows that a stock fell to \$20 and rebounded twice in six months, then a technical analyst may conclude that the next retreat to \$20 will attract enough buyers to lead to a rebound. Sales, earnings, and other fundamental data aren't part of the picture.
3. **Quantitative analysis** relies on number crunching. Financial and trading statistics and other data are collected and run through mathematical formulas programmed into computers. The results are used to guide investment decisions. The people doing the analysis are known as rocket scientists or quants, because their work is relatively complex.

Quotations

Whether you're looking at governments, companies, or hard assets, you'll need to know something about prices and trading to understand what's happening to their value.

The key details vary by market as we'll learn later. The data presented in Exhibit 1.1, a stock quotation

▲ IBM US \$ ↑ 200.83 +1.02 T 1s K 200.81/200.83 T 1x2 Equity
▼ At 13:26 Vol 1,719,826 Op 199.98 T Hi 201.1 N Lo 199.72 P ValTrd 345.084m

Exhibit 1.1: An IBM Stock Quote



IBM 1.95 07/16 \$ ↓ **103.373** - .137
 At 09:47 Vol 2,000 Op 103.373 Hi 103.373 Lo 103.373 YLD 1.153 TRAC

Exhibit 1.2: An IBM Bond Quote

for International Business Machines Corp., differs from what you see in Exhibit 1.2, a quote for one of IBM's bonds.

Yet some facts and figures are usually included, no matter what the security, and they are worth knowing now. Let's take a closer look at them.

Security symbol: This code, known as a **ticker**, is the first thing you'll see in any quote. Some symbols identify only the original seller or the issuer. Others include details about the security itself.

Uptick/downtick arrow: The direction of the arrow shows the last change, usually in the price. It's known as an uptick/downtick arrow because each price move in a security is called a tick. ▲ ▼

Latest price: This is the most basic piece of data in any quote. It's usually taken from trades. Some investments aren't quoted at a price as we'll see later.

Change on the day: By comparing this figure with the latest price, you'll know how much the market value has moved during the day.

Bid price: This is the highest price that anyone is willing to pay. It's shown because a seller would

rather get as much money as possible, all other things being equal.

Ask price: This is the lowest price at which anyone is willing to sell. It's known as the offer price. By either name, it's the flip side of the bid price, as a buyer would rather pay as little as possible. The difference between the bid and ask prices is known as the bid-ask spread. The narrower the spread, the easier it is for investors to buy and sell without moving the price, and vice versa.

Time: This shows whether the latest price is a reasonable indication of market value. If it's a minute or two old, then the answer is probably yes. If it's an hour or two old, then maybe not. Times are presented in 24-hour format. This means that a stock price posted at the close of U.S. stock exchanges, 4 p.m. Eastern time, would appear as 16:00.

Price range: Opening, high, and low prices for the day's trading put the current price in context. How much have prices moved during the day? Is the current price closer to the high or the low? It's easier to answer these questions when the data are readily available. For the same reason, many quotes include the previous day's closing price.

KEY POINT:

Returns, risks, and relative value are the three Rs of investing. Returns are based on price changes and any payments that investors receive. Risks can be general, specific to an investment, or somewhere in between. Relative value refers to what's cheap, expensive, or fairly valued.

STEP-BY-STEP:**REAL RETURN MATH**

1. The Standard & Poor's 500 Index fell 0.003 percent in 2011.
2. Dividends paid during the year equaled 2.089 percent of the index's value.
3. Add price changes and dividends to calculate the nominal return of 2.086 percent, or 2.1 percent after rounding.
4. Inflation was 3.4 percent, based on the change in the Consumer Price Index (CPI) for the 12 months ended in November.
5. Subtract inflation from the nominal return to calculate the real return of minus 1.3 percent.

You may have noticed that volume, or the amount of trading, isn't part of this list. That's no accident. Volume is available mainly for stocks and other securities that trade on exchanges. For currencies, bonds, and hard assets, they often are hard to find or undisclosed.

Three Rs

Now that you have gone this far, it's time to address a basic question: What's in it for me? Put another way, how would markets for investing in governments, companies, and hard assets affect me? To find the answer, you have to focus on the three Rs of returns, risks, and relative value.

The first two Rs, returns and risks, go together. If one investment produces higher returns than another, then it's usually riskier as well. Investors who pay too much attention to the returns can end up suffering unexpected losses when a change in market direction highlights the risks.

Relative value, the third R, begins with understanding the relationship between the first two. If the price of a security or hard asset falls, it's possible the move might be temporary and the potential returns may rise accordingly. It's also possible the investment has become more speculative. Returns in the future may be the same or lower after adjusting for the added risk.

These kinds of judgments are essential in determining whether an investment is cheap, expensive, or fairly priced, the goal of relative-value analysis. They can be made for a specific security, between securi-

ties in a single market, between market segments, and among markets as we'll see again later.

Returns

Price changes usually make the biggest contribution to returns on an investment. Their effect depends on the direction of the move and on whether an investor owns the security or asset or is betting on a decline.

The first point is obvious enough. Investors in a government, company, or hard asset want to make money. The same goes for anyone who's betting against them. The second point refers to whether someone has a long or short position.

Investors can go long through the primary or secondary market. Either way, the price they pay for a security or asset becomes the starting point for determining their returns.

To go short, investors borrow securities or assets and sell them as mentioned earlier. The borrowing is usually conducted in a securities-lending market, where investors are paid for making their holdings available.

The price of the second transaction, or short sale, is the basis for calculating returns. If the price declines, then short sellers can make money by buying back whatever was sold and by repaying the lender. Their profit comes from the gap between the short sale and market prices. If the security or asset rises, then the short seller loses.

When we study returns later, we'll focus on what investors in governments, companies, and hard assets will earn. Remember, though, that rising prices don't

lead to gains for everyone invested in a market. Lower prices don't hurt everyone either.

We'll consider what else affects returns besides changes in price. Anyone who lends money to governments and companies typically earns interest. Stocks often pay dividends. Gold and other commodities don't provide either type of payment, which means returns are more closely tied to price moves. Real estate owners receive lease payments or rental income.

Inflation reduces returns by making these payments less valuable before they are received. Investors take this effect into account by tracking real returns, which are adjusted for inflation. Figures that don't have any adjustment are known as nominal returns.

Costs and expenses hurt returns. Buying and selling securities and hard assets requires the payment of trading fees. Having someone hold them in an account adds to the cost. You incur storage and transportation expense for commodities and maintenance expenses for real estate. Taxes are imposed on interest and dividend payments and investment gains as a rule.

Because the costs can vary considerably from one investor to the next, we'll keep the discussion of them to a minimum in later chapters. Even so, you should learn about the tax benefits that go with investing in some markets.

Risks

Investors probably wouldn't bother putting money into governments, companies, and hard assets if they knew the prices of their holdings would fall

rather than rise. Yet that's a risk they inevitably take when they buy securities, commodities, or real estate.

The short sellers we encountered earlier have the opposite risk. When their asset's price increases, the value of their short position declines, and vice versa. Their losses can be infinite. Buyers can only lose what they paid for their holdings plus investment fees and expenses.

Either way, prices may go in the wrong direction. This is called market risk. It's a concern for anyone who's invested in a security or market, whether the holding is direct or indirect.

Another universal risk is the threat that investors won't be able to sell an asset at the current market price because there aren't enough potential buyers around. This is known as **liquidity** risk. The phrase refers to the ability to raise cash, known as a liquid asset. Some investments are more liquid than others because there's more trading in them. It's probably much easier to sell a 10-year Treasury note, for example, than a 10-year corporate note. That's the case because the government security changes hands all day, and the company debt might trade occasionally.

Demand for actively traded securities sometimes evaporates. Shares of some of the biggest U.S. companies changed hands for as little as one cent a share on May 6, 2010, when the Standard & Poor's 500 Index plunged as much as 10 percent before rebounding. That's liquidity risk in the extreme.

KEY POINT:

For owners of a security or hard asset, market risk is the possibility of a drop in value. For short sellers, it's the opposite.

DEFINITION:

Liquidity

Liquidity is the ease of buying and selling without causing price changes.

KEY POINT:

Currency-market moves can affect the value of any investment. When the dollar is rising, demand for investments priced in the U.S. currency tends to increase. When the dollar is falling, assets denominated in other currencies become more valuable.

Risks found outside the markets can trip up investors in governments, companies, and hard assets as well. Four of them are worth a closer look.

We'll start with economic risk, or the possibility that slower growth or contraction—in the worst case, a recession or depression—will cut government tax revenue along with corporate sales and earnings. Risk exists when growth accelerates, as companies must pay more for workers or raw materials. Companies most vulnerable to this risk are known as cyclical because their fortunes are closely linked to the economy's up-and-down cycles.

Political risk is the potential for legislative actions to deter or prevent governments and companies from reaching their goals. This risk was especially pronounced for the United States in July and August 2011 when President Barack Obama and Congress were unable to agree on raising the country's debt ceiling until the limit was almost reached.

Policy risk is a specific type of political risk, which isn't limited to the executive and legislative branches. It's focused on monetary policy, controlled by the Federal Reserve (Fed) and other central banks, and fiscal policy, defined by taxing and spending decisions made by the president and Congress.

Monetary policy affects the amount of funds available to the economy as well as their cost, otherwise known as interest rates. The Fed's version is designed to meet two goals: containing inflation and maximizing employment. The central bank pursues these objectives by adjusting the amount of money in the

economy from day to day and by setting benchmark rates.

Additional moves are made when necessary, as they were during the 2008 financial crisis and its aftermath. The Fed added hundreds of billions of dollars to the economy through bond purchases, a practice known as quantitative easing, and started paying interest on funds that banks kept on deposit.

Fiscal policy shapes the way a government takes in and spends money, which in turn affects the economy's performance. The types of taxes that households and businesses must pay and the rates they are charged affect the revenue side. Outlays are linked to decisions about national defense, social programs, and other areas that the government manages.

Policy decisions can explain why the U.S. federal budget was balanced for part of the 1990s, for instance. They can account for the deficits that reached more than \$1 trillion annually during the next decade.

Investors have to concern themselves with currency risk. Because U.S. stocks and bonds are priced in dollars, their value is affected by the dollar's value against other currencies. If the dollar is dropping, then demand from non-U.S. investors may decline, causing prices to fall.

Currency risk can cut the opposite way as well. A rising dollar makes U.S. exports more costly to overseas buyers, which tends to reduce international trade and curtail economic growth. Gains in the dollar reduce the value of sales and profits that U.S. companies make outside the country.

We'll examine more specific risks in later chapters. Credit risk, or the ability of a government or company to keep up payments on its debt, is one of them. Another is business risk, or the threat that a company's operations or finances may falter.

Relative Value

U.S. government bills, maturing in one year or less, paid next to nothing after the Fed began targeting near-zero interest rates at the end of 2008. Earlier in the 2000s, the securities rewarded investors with rates of 6 percent or more. During the 1980s, rates exceeded 10 percent.

The historical comparisons show Treasury debt is far less lucrative than it used to be. They provide a starting point for determining whether the securities are cheap, expensive, or fairly priced in relative terms. Similar analysis is done on all the other types of securities we'll cover.

History only tells part of the story. Investors have to determine how much risk there is today for a government, company, or hard asset. Then they have to decide whether the potential returns are high enough to justify taking that risk.

The opinions of credit-rating services, especially Standard & Poor's, Moody's Investors Service, and Fitch Ratings, are often part of that process. These companies assess the risks that go with debt securities. Their judgments help shape the views of investors, for better or worse.

Investors may study two securities that are essentially the same except for the maturity date or another

key detail. Relative-value analysis would help them decide whether the difference matters, based on the potential returns.

The same issue arises when looking at similar securities from different entities. Suppose investors can choose between a three-month government bill and a corporate security maturing at about the same time. The company probably will be a riskier bet than the government. If the corporate security provides enough additional income to compensate for the greater risk, it may be worth buying. If not, it's the other way around.

Different securities from the same entity can be studied this way. Consider the example of a company that has publicly traded bonds and shares. It's possible to decide which is cheaper by comparing interest payments on the debt with dividends on the stock even though the payments aren't identical.

Relative-value comparisons like these can be extended to entire markets. They help investors decide whether to focus on stocks or bonds, how much cash to keep on hand, and whether to put money into hard assets, among other things.

The criteria used to determine what's cheap, expensive, and fairly priced vary by market. For bills, notes, bonds, and other types of debt, interest rates are important. Though the rates differ, as we'll learn later, there's a common thread to how they are interpreted. Investors want to know how much they stand to earn for lending out money, and rates are the guidepost.

KEY POINT:

Rating services are private companies though they are often called agencies, and some of them have official recognition from U.S. and international regulators.

STEP-BY-STEP: RISK AND RETURN

1. Suppose a three-month Treasury bill has a 0.1 percent rate.
2. Suppose a three-month corporate security has a 0.5 percent rate.
3. Subtract the Treasury bill rate from the corporate rate, and what's left is 0.4 percent.
4. The 0.4 percent is what an investor gets paid for lending money to the company, rather than the government.
5. The investor has to determine whether the additional amount is worth the risk.
6. Relative-value analysis guides the decision-making.

Investors in debt securities are concerned with a borrower's ability to pay interest on time and repay the money when it's due. This leads them to focus on cash: where it's coming from, where it's going, how much exists, and how fast it's growing. The less a borrower needs the money, the more secure someone will be with owning its debt.

Stock investors also concentrate on cash. For one thing, they're interested in a company's ability to pay dividends. For another, companies with cash can buy back shares, which can increase returns on the remaining stock. These payouts help determine relative value as do revenue and earnings, which indicate how well the business is doing.

Relative-value comparisons are more basic for hard assets, if only because less data are available. For commodities, history and supply-demand analysis play larger roles than they would in securities. There aren't any interest, dividends, and earnings to use in deciding what's cheap and expensive.

In real estate, it's possible to assess value through comparisons between a property and similar ones that have been sold recently. That said, the analysis isn't as straightforward as finding rates on bonds or financial ratios for stocks. Real estate doesn't change hands that often, so the right numbers can be elusive.