## IN THIS CHAPTER

» Getting a handle on what exactly bonds are
» Knowing why some bonds pay more than others
» Meeting the major bond issuers in Canada and the US
» Considering individual bonds versus bond funds

## Chapter 1

## Getting Interested

 in BondsLong before we ever knew what a bond was, we both shared an experience early in life where we agreed to lend a small amount of money to friends. This was the first time we'd ever lent money to anyone. Neither of us could recall why our friends needed the money, but they both promised to repay us. After all, they were our friends.

Weeks went by, then months, and we couldn't get our money back from our respective friends. One of us decided to escalate the matter to a higher authority, also known as the dad of one of our friends, Mr. Potts. The plan was for the dad to deliver a stern lecture to his son Tommy on the importance of maintaining his credit and good name. The conversation went something like this: "Er, Mr. Potts. . . I lent Tommy five bucks, and -"
"You lent him money?" Mr. Potts interrupted, pointing his finger at his deadbeat 12 -year-old son, who, at that point, had turned over one of his pet turtles and was spinning it like a top. "Um, yes, Mr. Potts - \$5." Mr. Potts neither lectured nor reached for his wallet. Rather, he erupted into boisterous laughter. "You lent him money!" he bellowed repeatedly, laughing, slapping his thighs, and pointing to his turtle-spinning son. "You lent him money! НА. . .НА. . .НА. . ."

And that, dear reader, was a very memorable first experience as a creditor. We both experienced similar outcomes, under different scenarios, where neither of us ever saw a nickel from our friends, in either interest or returned principal.

Oh, yes, we've learned a lot since then.

## Understanding What Makes a Bond a Bond

Now suppose that Tommy Potts, instead of being a goofy kid in the seventh grade, were the Canadian or US government. Or the cities of Vancouver, Toronto, or New York. Or Canadian Natural Resources Ltd. Tommy, in his powerful new incarnation, needs to raise not $\$ 5$ but $\$ 50$ million. So, Tommy decides to issue a bond. A bond is really not much more than an IOU with a serial number. People in spiffy business attire, to sound impressive, sometimes call bonds debt securities or fixedincome securities.

A bond is always issued with a specific face amount, also called the principal, or par value. Most often, simply because it's the convention, bonds are issued with face amounts of $\$ 1,000$. So, to raise $\$ 50$ million Tommy would have to issue 50,000 bonds, each selling at $\$ 1,000$ par. Of course, he would then have to go out and find investors to buy his bonds.

A bond pays a certain rate of interest, and typically that rate is fixed over the life of the bond (hence fixed-income securities). The life of the bond is the period of time until maturity. Maturity, in the lingo of financial people, is the date that the principal is due to be paid back. (Oh yeah, the bond world is full of jargon.) The rate of interest is a percentage of the face amount and is typically (again, simply because of convention) paid out twice a year, with some exceptions.

So, if a corporation or government issues a $\$ 1,000$ bond, paying 5.5 percent interest, that corporation or government promises to fork over to the bondholder $\$ 55$ a year - or, in most cases, $\$ 27.50$ twice a year. Then, when the bond matures, be it one year, or 10 or 20 years down the road, the corporation or government repays the $\$ 1,000$ to the bondholder.

In some cases, you can buy a bond directly from the issuer and sell it back directly to the issuer. But you're more likely to buy a bond through a brokerage house or a bank. You can also buy a basket of bonds through a company that packages bonds into bond funds, mutual funds, or exchange-traded funds. These brokerage houses and fund companies will most certainly take a piece of the pie - and sometimes a quite sizeable piece. More on that and how to control the size of that piece of pie in Part 4.

In short, dealing in bonds isn't really all that different from the deal I worked out with Tommy Potts. It's just a bit more formal. And the entire business is regulated by the Securities and Exchange Commission (SEC) in the US, the Canadian Securities Administrators (CSA) in Canada (among other national and provincial regulatory authorities), and most bondholders - unlike me in the seventh grade - wind up getting paid back!

## Choosing your time frame

Almost all bonds these days are issued with life spans, or maturities, of up to 30 years. Few people are interested in lending their money for longer than that, and people young enough to think more than 30 years ahead rarely have enough money to lend. In US and Canadian bond lingo, bonds with a maturity of less than five years are typically referred to as short-term bonds. Bonds with maturities of 5 to 12 years are called intermediate-term bonds. And bonds with maturities of 12 years or longer are called long-term bonds. With specific reference to Treasury securities in both the US and Canada, one month to one-year maturities are "bills," over one year to less than ten-year maturities are "notes," and 10 years and longer are "bonds."

When you look at the Globe and Mail's financial pages, you typically see the current rates of return for $2-, 5-, 10-$, and 30 -year bond terms next to their return figure. These are also common terms posted for US Treasuries, be they bills, notes, or bonds. In reality, most Canadian government bonds have terms of $1,2,3$, and 6 months; as well as terms for $1,2,3,4,5,7,10,20$, and 30 years. (We explain how returns are measured later on in Chapter 4.) In the US, bonds across all of these maturities are referred to as Treasuries or Treasurys. You may hear the terms Treasury Bill, Treasury Note, or Treasury Bond when US bonds are being discussed. In Canada, and when referring to Canadian equivalent financial instruments, a government bond can be called, for example, a Canada 1 Month Bill, Canada 2 Year Note, or Canada 10 Year Bond. Or, it can just be called a Canada Bond (or even Canadian Treasury) with the term indicated next to it. Sometimes they are just called Government of Canada Bonds, also with terms attached. There is no hard and fast rule for bond names and terms. In this book, we use terms interchangeably.

Government bonds can be bought in denominations ranging from $\$ 1,000$ to $\$ 1,000,000$. In Canada, you can find government bonds issued by both the federal and provincial governments, as well as municipalities and government agencies. Treasury "bills" in the US and Canada do not pay a coupon (something we explain in Chapter 4). Rather they are offered at a discount to face value. "Notes" and "bonds," on the other hand, pay you interest in the form of coupons, and this is
done semi-annually. T-bills are typically short-term investments, with maturities ranging from a month to a year.

In general, the longer the maturity, the greater the interest rate paid. That's because most bond buyers expect higher compensation in relation to the amount of time their money is tied up. The longer the time frame, the degree of risk increases that could affect the return. At the same time, bond issuers are willing to fork over more interest in return for the privilege of holding onto investors' money longer. We delve deeper into interest and yield on bonds in Chapter 4.

It's the same theory and practice with bank certificates of deposit (CDs) or term deposits (TDs). Typically, a two-year CD or TD pays more interest than a one-year CD or TD, which in turn pays more than a six-month CD or TD.

CDs, a term used more in the US, and TDs, a term used in Canada, are "time deposits" and are essentially savings accounts where you promise not to touch the money for a period of time. The same is true with a GIC, another financial instrument that most Canadians are familiar with. We keep our discussion limited in this book to GICs and TDs.

Government of Canada Bonds are sometimes just referred to as a "Canada Bond" (with the terms being one of $1,2,3$, and 6 months; and $1,2,3,4,5,7,10,20$, and 30 years).

The key difference between a guaranteed investment certificate and a term deposit is that term deposits usually have shorter terms (ranging between 30 and 364) days than GICs (usually locked in for at least one year and up to five years).

The different rates that are paid on short-, intermediate-, and long-term bonds make up what's known as the yield curve. Yield refers to the annual payout on your investment. Because longer-term bonds tend to pay more, the yield curve, when seen on a page, typically slopes up to the right. But sometimes the curve can be flat, or, in rare instances, even slope downward (that's called yield-curve inversion). In Chapter 4, we provide an in-depth discussion of interest rates, bond maturity, and the all-important yield curve.

## Picking an issuer you can trust to hold your money

Consider again the analogy between bonds and bank GICs. Both tend to pay higher rates of interest if you're willing to tie up your money for a longer period of time. But that's where the similarity ends.

When you give your money to a savings bank to plunk into a GIC (or TD, savings or chequing account, or foreign currency) that money - your principal - is almost certainly guaranteed (up to $\$ 100,000$ per account, per person, per ownership registration in a registered account such as an RRSP, TFSA, RDSP, or RRIF) by the Canada Deposit Insurance Corporation (CDIC). You can choose your bank because it's close to your house or because it gives lollipops to your kids, but if solid economics are your guide, your best bet is to open your GIC where you're going to get CDIC insurance (almost all banks carry it) and the highest rate of interest. End of story. "Per person, per ownership registration," in case you're wondering, means that a joint account would be insured up to $\$ 200,000$. Check out the CDIC website at www.cdic.ca for the latest updates and to see whether your financial institution is covered.
 REMEMBER

Things aren't so simple in the world of bonds, where the CDIC does not insure your investment. In this world - and I can't emphasize this enough - a higher rate of interest isn't always the best deal. When you fork over your money to buy a bond, your principal, in most cases, is guaranteed only by the issuer of the bond. That "guarantee" is only as solid as the issuer itself. (Remember our inaugural and only - lender experience?) That's why US Treasury bonds (guaranteed by the US government) and Government of Canada Bonds (fully guaranteed by the Canadian government) pay one rate of interest, Microsoft bonds pay another rate, and Cadillac Fairview Properties Trust bonds pay yet another rate. Can you guess where you'll get the highest rate of interest?

You'd expect the highest rate of interest to be paid by Cadillac Fairview. (Currently true, in large part thanks to a sluggish post-pandemic commercial real estate recovery.) Why? Because lending your money to the real estate developer involves the risk that your money may sink into a deep dark hole. In other words, if real estate values plunge and the developer cannot finance its projects, you may lose a good chunk of your principal. In order for investors to accept that amount of risk, the company has to pay a relatively high rate of interest. Without being paid some kind of risk premium, you'd be unlikely to lend your money to a company that may not be able to pay you back.

Conversely, the US and Canadian governments, which have the power to levy taxes and print money, aren't going bankrupt anytime soon. Therefore, US Treasury bonds and Canada Bonds, which are said to carry only a very small risk of default, tend to pay the most modest interest rates. Often, the interest rate paid on Treasury bonds is referred to as the risk-free rate.

REMEMBER
Bonds that carry a relatively high risk of default - are commonly called high-yield or junk bonds. Bonds issued by established and financially sound companies and governments (federal or provincial) that carry little risk of default are commonly referred to as investment-grade bonds.

There are many, many shades of gray in determining the quality and nature of a bond. It's not unlike wine tasting in that regard. In Chapter 4, and again in Chapter 14, we give specific tips for "tasting" bonds and choosing the finest vintages for your portfolio.

## Recognizing the difference among bonds, stocks, and cryptocurrencies

Aside from the maturity and the quality of a bond, other factors can weigh heavily in how well a bond performs. In the following chapters, we introduce you to terms that affect bond performance, such as callability, duration, and correlation, and explain how the winds of the Canadian and US economies - and even the whims of the bond-buying public - can affect the returns on your bond portfolio.

For the moment, we simply want to point out that, by and large, bonds' most attractive features for investors - and the traits that most bonds share - are stability and predictability, well above and beyond that of most other investments. Because you are, in most cases, receiving a steady stream of income, and because you expect to get your principal back in one piece, bonds tend to be more conservative investments than, say, stocks, commodities, cryptocurrencies, and collectibles. In a typical year, the value of investment-grade bonds might rise or fall no more than the stock market will on an average day, or some cryptocurrencies will in an average hour!

## THE BOND MARKET IS HUGE

How much is invested in bonds worldwide? Are you holding onto your seat? According to the latest figures compiled by the Securities Industry and Financial Markets Association, the total value of all bonds outstanding worldwide is now over $\$ 127$ trillion. That's more than five times the current gross domestic product of the United States the dollar value of all goods and services produced in that country in an entire year. The US fixed income market comprised 38.7 percent or $\$ 49$ trillion of the worldwide amount. In contrast, the Canadian market was 3.2 percent, or $\$ 4$ trillion of the worldwide total, and continues to grow. In 2007, the Canadian market was $\$ 1.55$ trillion; in 2021, it was $\$ 4$ trillion. Given that the stock market gets so much more attention than the bond market, you may be surprised to know that the total value of all stocks outstanding worldwide is about a "mere" $\$ 100$ trillion.

Another interesting fact is that in 2021, for US household liquid financial assets (bonds and equities) the size of the equity market holdings was actually slightly less than the bond market holdings. The same proportions apply to Canadian households.

Is conservative a good thing? Sometimes. Sometimes not. It's true that many people (men, more often than women) invest their money too aggressively, just as many people (regardless of gender) invest their money too conservatively. The appropriate portfolio formula depends on what your individual investment goals are and your personal taste for risk. We help you to figure these out in Chapters 12 and 13.

By the way, our comment about men investing more aggressively isn't a personal take on the subject. Some solid research shows that men do tend to invest (and drive) much more aggressively than do women.

## Why Hold Bonds? (Spoiler Alert: It Isn't Necessarily to Make You Rich)

In the real world, while lots people own bonds, they are often the wrong bonds in the wrong amounts, and purchased for the wrong reasons. Some people have too many bonds, making their portfolios too conservative; others have too few bonds, making their stock-heavy portfolios too volatile. Some have taxable bonds where they'd be better off with tax-sheltered bonds held in a registered plan such as an RRSP, RRIF, or TFSA, and vice versa. The first step in building a bond portfolio or any portfolio, for that matter - is to have clear investment objectives. ("I want to make money" - something we hear from clients all the time - is not a clear investment objective!) We'll help you develop clear objectives in Chapter 2. In the meantime, we want you to consider some of the typical reasons - both good and bad - as to why people buy and hold bonds. The main reasons we cover are for cash flow, diversification, and return (also called yield).
[heading] Going for Cash Flow
A typical reason is that people buy bonds because they perceive a need for steady income, and they think of bonds as the best way to get income without putting their principal at risk. It is generally accepted that bonds are a relatively safer investment than equities in general. That's because equities are exposed to more types of risk. Nevertheless, risks still exist with bonds, and we discuss those risks in Chapter 10.) But thinking of bonds, or bond funds, as the best - or only source of cash flow or income can be a mistake.

Bonds are a better source of steady income than stocks because bonds, in theory (and usually in practice), always pay interest; stocks may or may not pay dividends and may or may not appreciate in price. Bonds also may be a logical choice for people who need a certain sum of money at a certain point in the future such as college tuition or a down payment for a home - and can't risk a loss.

But unless you absolutely need a steady source of income, or a certain sum on a certain date, bonds may not be such a hot investment. Over the long haul, they have tended to return much less than stocks. We revisit this issue and talk much more about the differences between stocks and bonds, in Chapter 12.

## Going for Diversification

One of the essential reasons people buy bonds has to do with diversification. What is diversification, you ask. It is a strategy of investing that spreads risk across a portfolio of investments. Bonds and stocks move in opposite directions when markets change. Bonds increase in value when stocks decrease in value, and vice versa. So you can see how holding both bonds and stocks in a portfolio has a balancing effect."

The key to truly successful investing, as we outline in Chapter 11, is to have at least several different asset classes - different investment animals with different characteristics - all of which can be expected to yield positive long-term returns but that do not all move up and down together.

There are very few assets classes - if any! - that serve as valiantly as bonds where it comes to diversifying a portfolio of stocks. History proves this, and you don't need to go back very far. In 2008, when the S\&P 500 lost nearly 37 percent, US Treasuries rose by 20 percent, and Government of Canada Bonds well outperformed the S\&P/TSX as well.

You can hold many different types of bonds, meaning that another level of diversification exists. In this book, we focus on the heavy hitters: Government of Canada Bonds and Treasury bills; federal and provincial Crown corporation securities (also known or reported as agency or corporate bonds); Provincial bonds and Treasury bills; Corporate Bonds (of public companies); and municipal bonds (and sometimes their own distinct sub-entities). We devote entire chapters for these types of bonds, which collectively represent the bulk of the bond (fixed-income) market.

As Steve Jobs used to say, ". . . and one more thing . . ."
Bonds, in the land of fixed-income securities, also include financial instruments with cool and tongue-twisting names such as:
>> Bank, trust, and mortgage company securities and paper
> Asset-backed securities and paper of various kinds
> Mortgage-backed securities
>> Maple Bonds
> Strip Bonds
>> Real-return bonds
>> Structured Products such as fixed floaters, step-up bonds, and foreign Sovereign debt
>> Euro bonds
>> Bankers' Acceptances
> Corporate and finance company paper

We will touch some of on these types of products throughout the book.

## Going for the cash

Bonds aren't very popular with the get-rich-quick crowd. Bonds are to the tortoise what an insider hot stock tip is to the hare. But certain categories of bonds -high-yield corporate (junk) bonds, for example - have been known to produce impressive gains.


WARNING

High-yield bonds may have a role - a limited one - in your portfolio, as we discuss in Chapter 6. But know up front that high-yield bonds don't offer the potential long-term returns of stocks, and neither do they offer the portfolio protection of investment-grade bonds. Rather than zigging when the stock market is zagging, many high-yield bonds tend to zag right along with your stock portfolio. Be careful!

## THE BONDS IN YOUR WALLET. . .

A US Treasury or Government Canada bond represents a debt. To you. The US and Canadian governments owe you, and any time you want to you can turn in your bond for cash. Ah, but what's cash but another form of IOU! All banknotes (dollars, euros, pounds, bonds, bills, notes. . .) represent the issuing nation's central bank's debt to the public. So, what's the difference between a Treasury bond or Government of Canada Bond, and the $\$ 5$ bill in your wallet? Not much, really. Although dollar bills are never referred to as government bonds, that's really what they are, with two notable differences: One pays interest, however modest, for perhaps a month, or perhaps 20 years, while the other pays none. One - the one with the illustration of a tall former prime minister - because it pays no interest, has a more stable value. And where it comes to buying a cup of coffee, the $\$ 5$ bill is certainly the more practical of the two.

Some high-yield bonds are better performers than others - and they're held by relatively few people. We recommend those in Chapter 9.

Even high-quality investment-grade bonds are often purchased with the wrong intentions. Note: A US Treasury bond, though generally thought to be the safest bond of all, doesn't guarantee your return of principal unless you hold it to maturity. If you buy a 20 -year bond and you want to know for sure that you're going to get your principal back, you'd better plan to hold it for 20 years. If you sell it before it matures, you may lose a bundle. Bond prices, especially on long-term bonds yes, even US or Canadian government bonds - can fluctuate greatly. We discuss the reasons for this fluctuation in Chapter 4.

We also discuss the complicated and often misunderstood concept of bond returns. You may buy a 20 -year Canada Bond yielding 3 percent, and you may hold it for 20 years, to full maturity. Yes, you'll get your principal back, but you may actually earn more or less than 3 percent interest on your initial investment. It's complicated, but we explain this variation in a way you can understand - we promise! - in Chapter 4.

If you're old enough to remember back to the 1980s, you may recall double-digit interest rates - even on savings accounts! You could, early in the decade, purchase a Treasury bond paying 14 percent. High-quality corporate bonds back then were yielding 16 percent. That's a far cry from today, with 10 -year Treasuries paying way less than that, and highly rated corporate bonds paying perhaps 4 or 5 percent.

Figure 1-1 shows how the Federal Funds Effective Rate has risen and fallen over the past six and a half decades (shaded areas indicate US recessions). The Federal Funds Rate is an interest rate set by the Federal Reserve System, used for interbank loans, that's usually lower than, but has great sway over, all other interest rates, from savings account to CD, corporate bonds to Treasuries, and municipal bonds. It is also a key factor that holds sway over the interest rates set by the Bank of Canada which in turn affect the interest rates associated with the Government of Canada Bond and financial instruments such as GICs and term deposits in Canada.

Interest rates have not climbed into double digits at the time we're writing this book, but they have increased recently. Part of the reason is due to market forces. In about mid-2022 interest rates rose sharply due to inflation driven by supply/ demand imbalances, the conflict in Ukraine, and the fallout from the pandemic., and other factors). The central banks of most Western nations, including the Federal Reserve and Bank of Canada right here at home, have increased interest rates to bring inflation down and lower interest rates in turn. Low interest rates encourage companies to expand and consumers to buy. Low interest rates may hurt returns for bondholders, but they're good for just about all other players in the economy.

FIGURE 1-1: Bond interest rates over the past 65 years.


Board of Governors of the Federal Reserve System (US), Federal Funds Effective Rate [FEDFUNDS], retrieved from FRED, Federal Reserve Bank of St. Louis; https: //fred. stlouisfed. org/ser ies/FEDFUNDS, February 1, 2022.

What really matters to you, the bondholder, is what your real (after inflation) return is on the bonds you buy and hold. Remember when we talked earlier in this chapter about how at the onset of the 1980s you could've gotten 14 percent on a Treasury bond? Well, that wasn't as much as it sounds, not back then. The inflation rate in 1980 was more than 13 percent. In other words, the real return on Treasuries, after inflation, was pretty meager. The inflation rate today is relatively lower. However, the real return on today's Treasuries and Canada Bonds really isn't much less than it was 40 -something years ago.

Bonds aren't meant to deliver really high returns. They're meant to provide security. Why invest in anything that pays nominal returns? First, because Treasuries and Canada Bonds don't always pay low returns. We're now in an unusual time. Over the past 90 years or so, on average, bonds have returned a modest but still healthy 2.5 percent or so above inflation. Invest in bonds today, and mix up your Treasury and Canada Bond holdings with other bonds, and that's quite likely to be your return over the coming decades.

You must also remember that despite the low interest rates you get on bonds, they most likely keep even with inflation - and that's a lot more than you can say about keeping your money under the mattress or in a savings account. Sure, there are other ways to store your money without taking the risks of, say, owning stocks. But keeping your money in cash, you'll see a negative real return as inflation eats away your principal. Also know that when things really turn bleak for stocks, bonds tend to rally and may greatly offset your stock losses, as happened to investors in 2008. Cash can't rally. Most recently, as Canadians witnessed a steep rise in interest rates caused by the Bank of Canada's fight against inflation, bonds have become quite attractive to new investors.

## Don't get depressed over depressed or volatile rates

Bonds are an integral part - but not by any means the only part - of a smart, well-diversified portfolio. The other parts should include stocks and perhaps real estate and commodities. When you consider the current volatile-interest rate environment we're in, you may get depressed looking at your meager bond interest and declining growth stock values. (Growth stocks are very sensitive to interest rates and usually fall in value as interest rates rise.) You may be remembering back when you were collecting so much more. But you really should take a few steps back and look at the big picture. Look at your entire portfolio. Note that the high annual returns you see on your stocks in these past years are almost certainly lower now, due to higher interest rates as of late. Throughout this book, we focus more on bonds as crucial components of a great portfolio rather than as standalone investments. Bonds are an excellent complement to stocks and other equities such as REITs and ETFs.

Think of bonds as a salt-of-the-earth investment. We may love our salt, but we don't ever want to dine on salt alone.

## Introducing the Major Players in the Bond Market

Every year, millions - yes, literally millions - of bonds are issued by thousands of different federal, provincial, and state governments: government agencies, municipalities, financial institutions, and corporations. They all pay interest. In many cases, the interest rates aren't all that much different from each other. In most cases, the risk that the issuer will default - fail to pay back your principal is minimal. So why, as a lender of money, would you want to choose one type of issuer over another? Glad you asked!

Following are some important considerations about each of the major kinds of bonds, categorized by who issues them. We're just going to scratch the surface right now. For a more in-depth discussion, see the five chapters in Part 2.

## Keeping government in business

Federal, provincial, and municipal politicians like raising money by selling bonds, as opposed to raising taxes, because voters hate taxes. Of course, when the government issues bonds, it promises to repay the bond buyers over time. The more bonds the government issues, the greater its debt.

The current debt of the United States government is slightly more than \$31 trillion: almost $\$ 92,000$ for every US citizen. (Yikes! The figures in the first edition of this book, written not all that long ago, were $\$ 8.6$ trillion and $\$ 30,000$ per US citizen.) The interest payments on that debt currently total more than $\$ 560$ billion a year.

In Canada, the combined federal and provincial net debt in 2023 was $\$ 2.2$ trillion. The federal debt alone clocked in at $\$ 1.4$ trillion. Your individual share of that debt is $\$ 35,000$ at the time of writing this. You can see these and similar figures using the Canadian Taxpayers Federation debt clock tools at www. debtclock.ca.

Some US and Canadian economists argue that the national debt will lead us to ruin. Others argue that because the government can print money, the only real danger of running too long in the red is inflation, and until there's runaway inflation, we needn't worry about it. We're not going to solve this debate here. Our focus is on the role that Treasury bonds may play in your portfolio.

In Chapter 5, we explain in more detail all the many kinds of Treasury and other types of government bonds that exist, and the unique characteristics of each. For the moment, we merely want to point out that all government bonds are backed by the "full faith and credit" of the federal government. Despite their huge debt loads, the United States of America and Canada, aren't going bankrupt anytime soon. And for that reason, Treasury bonds and other types of government bonds have traditionally been referred to as "risk-free." Be careful, though. The prices of government bonds still fluctuate.

When bond experts speak of government bonds, such as Treasury bonds, as having no risk, or almost no risk, what they mean is that the bonds have no credit risk. But government bonds are very much subject to the other kinds of risk that beset most other bonds: interest rate risk, inflation risk, and reinvestment risk. We discuss these types of risk in Chapter 10.

## Collecting corporate debt

Bonds issued by Canadian and US for-profit companies are riskier than government bonds but tend to compensate for that added risk by paying higher rates of interest. (If they didn't, why would you or anyone else want to take the extra risk?) For the past few decades, corporate bonds in the aggregate have tended to pay about a percentage point higher than Treasuries of similar maturity. Since 2008, this spread has broadened, with ten-year corporate bonds paying about a percentage point and a half more than their governmental counterparts.
tIP

As you'll discover, we're big fans of diversification. It's especially important to diversify when dealing with any kind of investment that comes with default risk. For that reason, we don't like to see Canadians plunk too great a percentage of their portfolios into any individual corporate bond. Wealthier investors - those with portfolios of $\$ 1$ million or more - can diversify by buying a collection of bonds. Savvy investors can temper their risks by familiarizing themselves with bond ratings and researching the issuing companies' bottom lines. But we generally advocate bond ownership - especially when it comes to corporate bonds in bond funds. We discuss these funds at the end of this chapter and again, in greater depth, in Chapter 16.

Oh, one more little detail about corporate bonds for the moment: They tend to get called a lot. That means that the corporation changes its incorporated mind about wanting your money and suddenly throws it back at you, redeeming the bond. Bond calls tend to happen when rates have fallen, and that's no fun. They add a dose of unpredictability to what should be a predictable investment. Read all about calls and other peculiarities of the corporate bond world in Chapter 6.

## Demystifying those government and government-like agencies

Federal agencies, such as the Government National Mortgage Association (Ginnie Mae), Canada Mortgage and Housing Corporation (CMHC), and other governmentsponsored entities issue a good chunk of the bonds on the market. Even though these bonds can differ quite a bit, they're collectively referred to as agency bonds. What we call agencies are sometimes part of the actual government, and sometimes a cross between government and private industry.

To varying degrees, the Canadian and US governments will serve as protective big brothers or sisters if one of these agencies or entities were to take a financial beating and couldn't pay off their debt obligations.

In general, agency bonds are considered the next-safest thing to Treasury bonds. As such, the interest paid on these bonds is typically just a smidgen higher than the interest rate you would get on Treasuries of similar maturity, although in recent times, you can get a smidgen-plus. At the time of this writing, agency bonds maturing in 2032 were yielding about 4 percent versus 3 for Treasuries. Recent yields were volatile due to the effects of ongoing inflation as well as a few bank failures (as in Silicon Valley Bank) thrown into the economic mix.

By convention, when financial people (we qualify) write about "Ginnie Mae bonds," CMHC bonds, or "Treasuries," and there's no specific mention of maturity, you can assume that the writer is referring to bonds with a 10 -year maturity. That's just the customary default. It's like when a recipe calls for "sugar" without stipulating what kind of sugar. You just instinctively reach for white sugar.

We discuss agency bonds - the traditional kind of bonds these agencies offer in Chapter 7. But many bonds that the federal agencies issue or guarantee are distinctly nontraditional in that they represent an ownership interest in pools of mortgages. These bonds, called mortgage-backed securities, are more complicated than traditional bonds. And we're sorry to say that many people who invest in them haven't the foggiest idea what they're investing in - although some found out the hard way in late 2007 and 2008, when some of their mortgage-backed securities took a serious hit. More about these babies in Chapter 7 as well.

## Going cosmopolitan with municipal bonds

The bond market, unlike the stock market, is overwhelmingly institutional. In other words, most bonds are held by federal, provincial, and state governments; insurance companies; money/asset managers; pension funds; and endowment funds. The only exception - the only kind of bond more popular with individual investors than institutions - is the municipal bond.

Municipal bonds (munis) are issued by US and Canadian cities counties. They're used to raise money for either the general day-to-day needs of the citizenry (schools, roads, sewer systems) or for specific projects (a new bridge, a sports stadium). Munis' popularity with individual investors may be due in small part to the warm and fuzzy feelings to be had by investing in local infrastructure.

Interest on most municipal bonds in the US is exempt from US federal income tax. Interest on municipal bonds issued by your own city or state may be exempt from both federal and local taxes. Traditionally, the interest rates paid have been modest, but many individual investors - especially those in the higher tax brackets - often get a better after-tax return on municipal bonds than on comparable taxable bonds. In recent years, US municipals have tended to yield slightly more than Treasuries - even on a before-tax basis.

In Canada, those buying municipal bonds earn interest that is taxed. The only exception is if the bond recipient is tax-exempt. These recipients include pension funds or in your case as an individual, hold the bonds in a registered plan such as an RRSP, RRIF, or TFSA. We discuss the taxation of bonds in Canada more deeply in Chapter 14.

## THE US BOND MARKET PIE

The US Treasury has more bonds outstanding than does corporate America, and corporate bonds in the aggregate are worth more than municipal bonds. Here are a few of the largest segments of the US bond market and how they compare in total dollar value. The numbers are according to the Securities Industry and Financial Markets Association (SIFMA). The relative ratios for the Canadian bond market are essentially the same, owing to the much smaller bond market size.

Types of Bonds Outstanding (in trillions), end of 2021:

- Treasury bonds: $\$ 22.6$ (see Chapter 5)
- Corporate bonds: \$10.0 (see Chapter 6)
- Municipal bonds: $\$ 4.0$ (see Chapter 8 )
- Agency bonds: $\$ 1.4$ (see Chapter 7)

Like corporate bonds, but unlike Treasuries, municipal bonds are often subject to being called. You may think you're buying a ten-year investment, but you may be forced to relinquish the bond in two years instead. (Bond brokers must, per regulations, reveal this "defect," and they usually do, but they certainly don't highlight it.)

Municipal bonds tend to be less risky than corporate bonds but not as safe as Treasury and agency bonds. Just as corporate bonds are given ratings, so are municipal bonds. It's important to know before investing whether the local government issuing a bond has the wherewithal to pay back your principal. Cities don't go bankrupt often, but it does happen. And some pundits have expressed fears that, in the future, more municipalities than ever may declare bankruptcy. (That fear is part of what's driven up the yield on these bonds.) We reveal much, much more on munis in Chapter 8.

## Buying Solo or Buying in Bulk

One of the big questions about bond investing that we help you answer later in this book is whether to invest in individual bonds or bond funds.

We generally advocate bond funds - both bond mutual funds and exchangetraded funds. Mutual funds and exchange-traded funds represent baskets of securities (usually stocks or bonds, or sometimes both) and allow for instant and easy portfolio diversification. You do, however, need to be careful about which funds you choose. Not all are created equal - far, far from it.

We outline the pros and cons of owning individual bonds versus bond funds in Chapter 14. Here, we give you a quick sneak preview of that discussion.

## Picking and choosing individual bonds

Individual bonds offer investors the opportunity to really fine-tune a fixedincome portfolio. With individual bonds, you can choose exactly what you want in terms of bond quality, maturity, and taxability.

For larger investors - especially those who do their homework - individual bonds may also be more economical than your average bond fund. But that's only true for investors who are up on the latest advances in bond buying and selling.

Once upon a time, any buyers or sellers of individual bonds had to take a giant leap of faith that their bond broker wasn't trimming too much meat off the bone. No more. In Chapter 15, we show you how to find out exactly how much your bond broker is making off you - or trying to make off you. We show you how to compare comparable bonds to get the best deals. And we discuss some popular bond strategies, including the most popular and potent one - laddering your bonds, which means staggering the maturities of the bonds you buy.

## Going with a bond fund or funds

Investors now have a choice of hundreds of bond mutual funds and exchangetraded funds. Most have the same basic drawbacks: management expenses and a certain degree of unpredictability above and beyond individual bonds. But even so, many make for good investments.

Where to begin your fund search? We promise to help you weed out the losers and pick the best. As you'll discover we're proponents of buying index funds - mutual funds or exchange-traded funds that seek to provide exposure to an entire asset class (such as bonds or stocks) with little trading and low expenses. Keeping your expenses rock-bottom is crucial. Index funds are the way to go for most investors to get the bond exposure they need. We suggest some good bond index funds, as well as other bond funds, in Chapter 16.

