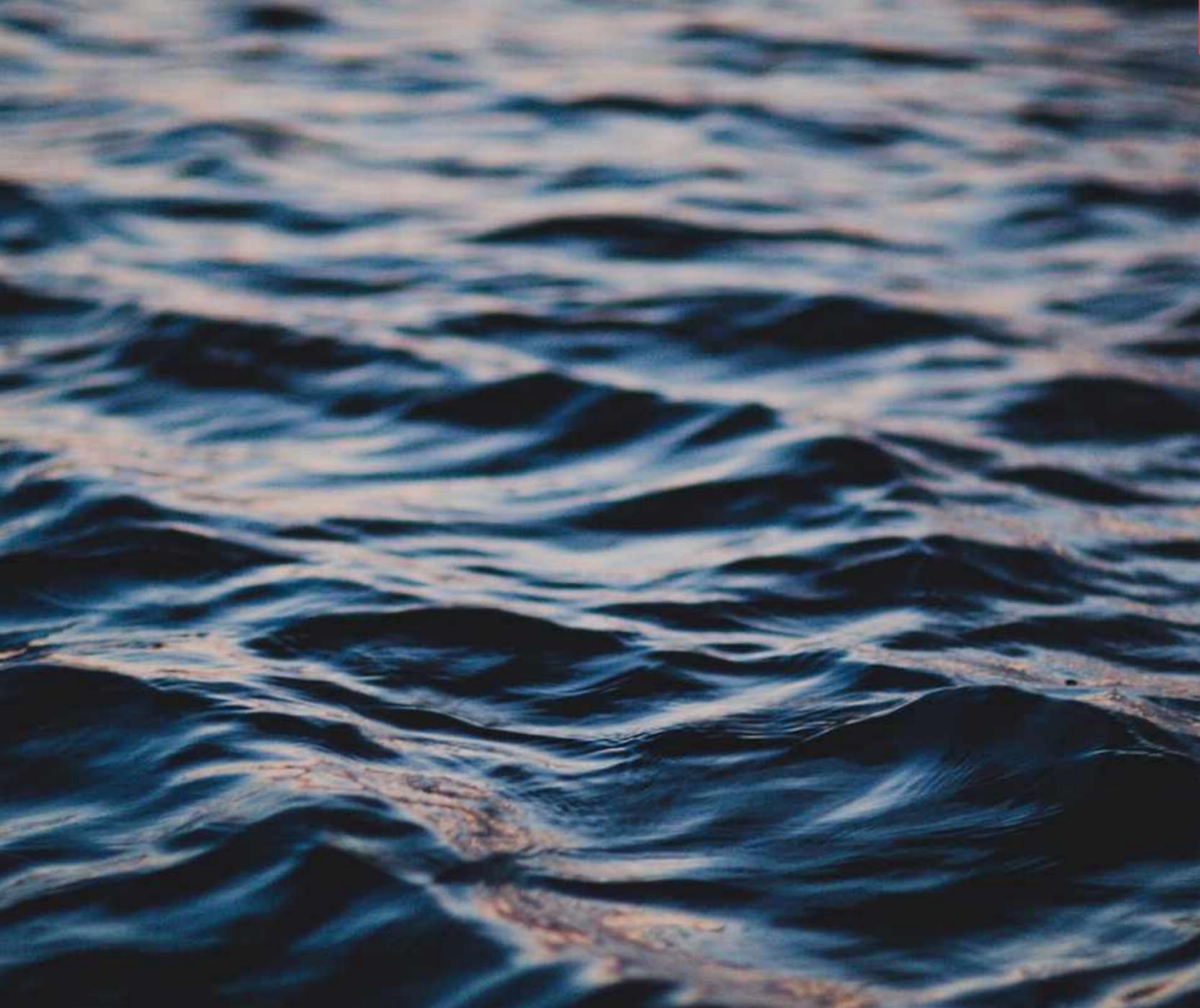


Personal Finance Fundamentals

HEATHER HOLDEN, PHD



You're obviously ready to take charge of your personal finances since you've taken the time to download this whitepaper - this is going to be an awesome refresher for you on some topics and a helpful learning resource on other topics.

From budgeting to borrowing, real estate to credit ratings and beyond, read this all in one sitting or over time, whatever works for you - you're on the right path to gain the knowledge and confidence to make a lifetime of smart financial decisions.

Let's get right into it!

Contents



1. DEBT AND BORROWING

- a) Credit Cards
- b) Line of Credit
- c) Mortgages
- d) Credit Ratings
- e) Smart Debt

2. BUDGETING

- a) Time Value of Money
- b) How to Use Time Value of Money in Everyday Life
- c) Budgeting Process
 - i) First Phase: Prepare
 - ii) Second Phase: Analyze
 - iii) Third Phase: Decide and Act
- d) Key Steps

3. INVESTING

- a) The What: Products
- b) The How: Platforms
- c) The How Much: Diversification
- d) The When: Don't even Try to Time the Market
- e) The Controllable: Fees
- f) The Slightly Controllable: Taxes
- g) The Shelters
- h) Human Nature: Behavioural Finance and Risk
- i) Behavioural Biases

4. REAL ESTATE

- a) Why Real Estate
- b) Location, Location, Location
- c) Macro Factors
- d) Micro Factors
- e) Housing Affordability and the Rent vs. Buy Decision

1. Debt & borrowing

HEATHER HOLDEN, PHD

When it comes to financial debt, people tend to think in extremes. Either “debt is bad - avoid it at all costs!” or “why wait - buy now, pay later!”.

Neither extreme is correct, but there are elements of each that are valid. Debt can get a person into an enormous amount of trouble, but it's unrealistic and even imprudent to live completely debt free.

So, what is a smart way to use debt?

I'll address this question by discussing the following debt and borrowing topics. First, I'll cover the basic features of common sources of debt and things to consider when choosing which sources of debt are most appropriate for you. Next, I'll talk about credit scores, how they work, and how you can manage yours. Finally, I'll suggest rules to follow for borrowing in your personal life.

When comparing sources of debt, you'll need to consider the credit limit available to you, how easily the debt can be attained, what is the cost of borrowing, when does it need to be repaid, how often do payments need to be made, and so forth. Some of this will be a review for you but stick with me.

Let's start with credit cards.

Credit cards are issued by financial institutions and retailers. These cards allow you to spend money based on your promise to repay the issuer of the credit card. When you make a purchase using a credit card, the issuer is providing you with the funds directly, which they collect from you later.

Credit cards are generally easier to obtain than other forms of debt. They're widely accepted as valid forms of payment, can often conveniently be used internationally, and have a variety of rewards and loyalty programs to attract your business. And they allow you to easily track what you're spending your money on and where.

Using your credit card responsibly by making regular payments in full helps you establish a good credit history, which will be incorporated into your credit score. We'll cover this later.

Before applying for a credit card, you should compare the different types of cards available to you. Different credit cards may vary significantly. Some of the important features that you'll want to compare are the annual interest rates, annual fees, and other charges for transactions like cash advances, foreign currency transactions, and balance transfers.

Annual interest rates for credit cards are generally between 15% and 21%. There are cards that charge lower interest rates, but they may have annual fees. And there are cards that charge higher rates, but have other benefits worth considering, especially if you never carry a balance and therefore never pay interest anyway.

It's important to understand how the mechanics of regular credit card transactions accrue interest and what it means to pay the minimum monthly balance versus the entire outstanding balance owing.

Normally, when you make a purchase, there's a minimum period, usually 21 days, during which interest does not accrue.

On every monthly credit card statement, you'll see a number normally referred to as 'minimum balance', which represents the amount of money that's due now. However, you'll also notice a more important number normally referred to as 'full balance', which is the total amount you have charged to the credit card.

If you were to only pay the minimum balance, interest would begin to accrue on whatever remains unpaid, starting back from the date of purchase.

This means that NOT repaying your full balance each month can be quite costly.

Now let's move on to Lines Of Credit

A line of credit is essentially a loan, usually from a bank, that allows you to borrow a predetermined amount of money. The characteristics are like a debit card in that you can use the funds to withdraw cash, pay for purchases or services and transfer balances to other accounts or pay bills.

You can often write personal cheques from a line of credit and, if you have other chequing or saving accounts with the same bank, you can often set up your overdrafts to transfer directly to your line of credit in order to avoid paying certain fees.

Unlike credit cards, the money you use from your line of credit starts accruing interest immediately. And it accrues interest until it's paid off in full.

If you have not used your line of credit, the balance will be 0. You will not accrue interest and will usually not have fees to pay (keep an eye on this though).

There are different types of lines of credit: personal, home equity, student, secured, unsecured. The differences will usually relate to the credit limit and the interest rate.

The major benefit of a line of credit over a credit card is that the interest and fees that are charged can be lower than those charged on credit cards (do keep an eye on this too though). This allows you to manage your borrowing in a way that minimizes the interest that you pay.

A major risk with a line of credit is that because these loans are offered at a lower interest rate and they're available on-demand, people could accumulate a larger balance than they would otherwise.

Next, we'll talk about Mortgages

Most of us need to borrow money to buy a home. A mortgage is a loan that's specific to real estate properties. The property you buy serves as collateral and secures this loan. In order to obtain a mortgage, a minimum down payment is required.

Depending on the purchase price, the minimum down payment percentage ranges from 5% to 20% of the purchase price. A down payment cannot come from other sources of debt such as lines of credit or credit cards.

If the down payment you have saved for your home is less than 20%, if you are self-employed or if you have poor credit history, you are required to purchase mortgage loan insurance. This provides the financial institution additional protection in the case you default on a payment.

When you consider a mortgage, you need to select various characteristics, which will usually be set for the term of your mortgage. A common mortgage term is five years in Canada. However, depending on your specific needs, the term can be shorter or longer and can be open, meaning it can be changed with applicable fees and charges.

Once the mortgage term expires, you'll need to either renew the balance of the loan, refinance the loan, or pay it off in full.

An important mortgage feature you'll need to select is the amortization period, which is the length of time it will take you to repay the entire mortgage including both the principal and interest. Every payment that you make towards your mortgage includes an interest and principal component.

If you have a mortgage of \$300,000 and every month you pay \$1,500, by the end of the year, you will have paid \$18,000. However, your mortgage balance will not have gone down to \$282,000, unfortunately. The payments made in the earlier years will go mostly towards interest and as you approach the end of the amortization period, more and more of your payments will contribute to paying down the principal component of your loan.

The total amount of interest that you will pay on a mortgage by the end of the amortization period is significant.

Another important mortgage feature to consider is the type of interest rate. You'll need to decide whether a fixed or variable interest rate is most appropriate for you. The primary benefit of a fixed interest rate is that your mortgage payments will remain the same for your entire term regardless of changes in market rates.

Variable interest rates are subject to change depending on market interest rates. If market rates increase, your mortgage payments also increase. If rates decrease, your mortgage payments decrease.

Usually, variable rates are lower than fixed rates offered to compensate you for the risk of uncertainty.

Another mortgage feature you will need to consider is the frequency of your mortgage payments: every week, every two weeks, every month, every two months.

Online mortgage calculators allow you to see how different variables affect your overall mortgage payment, the total interest you will pay on your mortgage, and the time it will take you to repay the mortgage in full.

Now, let's talk about the concept of creditworthiness and how your credit history impacts your ability to borrow money and how much it costs you to do so.

How do lenders assess your creditworthiness and where do they get this information? Among other sources, lenders will review your credit history using your credit report.

Your credit report is like a life-long report card. Creditors, lenders, landlords, employers and other parties like insurance companies, utilities and mobile phone companies can access your credit report in order to view your credit history and credit score. From this report, they're able to see the type of credit that you're using and how responsibly you're using it.

Your report contains information about your credit cards, lines of credit, and loans. It also records whether you've had an 'insufficient funds' charge, if an account has been closed for cause due to money owing or fraud committed, if you've had a bankruptcy or court decisions against you that relate to credit and more.

Information generally stays on your credit report for a period of six years. However, some information may stay longer or shorter. For instance, a declaration of bankruptcy may remain on a credit report for longer. Also, good credit behaviour, such as making regular payments on time, can remain on your report for longer.

A mathematical formula calculates your credit score using the information from your credit report. The score is a three-digit number that falls between the range of 300 to 900. The higher the score, the more creditworthy you are. This score helps creditors assess your credit behaviours and how risky it will be for them to lend you money.

Factors that impact your score include how long you've had credit for, if you have an outstanding balance on your credit cards (including joint credit cards, by the way), if you regularly miss payments, the amount of your outstanding debts, being close to your credit limit, the number of times you tried to get more credit, the types of credit you are using, if your debts have been sent to a collection agency, or any record of insolvency or bankruptcy.

A good credit score will help to ensure that if you need credit and urgently apply, you're more likely to be loaned the money. Additionally, having good credit worthiness will often allow you to get more preferential interest rates.

In general, it's important to be aware of how creditors will view you. You can obtain a copy of your credit report online and you should because it will allow you to review your credit information and detect any errors or anomalies like identity theft.

Finally, some general rules for how to smartly use debt.

The first rule of smart use of debt is to try to live within your means as much as possible. Before you buy something on credit, question whether the benefits outweigh the cost of borrowing. Insure you are using debt wisely by paying off your credit card in full every month and paying the lowest interest rate possible when you do have to borrow.

The first step in deciding whether to invest a lump sum of savings or pay off debt is to compare the return you'd receive if you invested your money (also make important note of whether that return is certain or uncertain) to the interest you're paying on your debt.

The second step is to think about the after-tax differences: would you be investing in your TFSA, thus no tax impact? Would you be investing in your RRSP, thus deferred tax impact, but contributions reduce the current year's taxable income? Or would you be investing in a non-registered account and thus only receive the after-tax return of your invested lump sum?

Another general rule of smart debt is to repay the debt you have accumulated according to a disciplined plan. The first step is making sure you'll be able to make all scheduled payments before you borrow money in the first place and the second step is being confident in your discipline to repay the debts you do have.

2. Budgeting

HEATHER HOLDEN, PHD

BUDGETING, WOO HOO!

Time Value of Money

You know about the time value of money, but let's review how to incorporate it into your own budgeting exercises.

This core principle of finance, time value of money, holds that provided money can earn interest, any amount of money is worth more the sooner it is received.

Let's say you deposit \$100 today in the bank. The bank offers you a 4% interest rate per year. How much interest do you earn if you leave your money in the bank for one year? You start the year with \$100. Over the year, you earn interest on this original amount at the rate of 4%. Thus, interest earned is 4% of \$100 or \$4. So, you end the year with a grand total of \$104.

What if you were to deposit \$100 in the bank and leave it there for two years? All else being constant, you will begin year two with \$104 and now, you will earn 4% on this amount. Thus, the interest earned in year two will be 4% of \$104. That works out to \$4.16. Thus, you end this second year with \$104 plus the interest of \$4.16 for a total of \$108.16.

In year two, you earned interest on the original \$100, but you also earned interest on the \$4 worth of interest that you earned in year one. This idea of earning interest on interest is called compounding.

We call the \$100 today the "present value" and the \$104 one year later we call the "future value." Because of the interest earned, future values are larger than present values.

The longer you leave the present value invested, the larger the future value. The larger the interest rate, the larger the future value. The more frequent the compounding within the timeframe, the larger the future value.

There is one very important consideration to keep in mind now that we've reviewed how future values are calculated. You can only ever compare values at the same point in time.

It is incorrect to compare money at different points in time.

For example, it would be incorrect to say that \$120 today is smaller than \$135 two years from today. We don't know what the \$120 would grow to in two years. We expect it would be greater than \$120, but we don't know how much larger and so, we cannot compare the two values as is.

We can only ever compare dollar values at the same point in time.

So, how then do you compare dollar values that are not at the same point in time? In this case, we need to bring them to the same point in time.

We know that compounding is making money time travel forward. The reverse of this, making money time travel backwards, is called "discounting".

For example, if someone were to offer to pay you \$104 one year from today and the interest rate is 4% for the upcoming year, you can calculate the present value of that amount offered to you in the future by doing a discounting calculation.

When you apply the reverse calculation to compounding (you can find 'present value' and 'future value' calculators online), you will find that the present value of \$104 when interest rates are 4% is \$100.

When we make money time travel backwards, we end up with smaller values. When interest rates are higher, the present value is LOWER!

Let's look at a few ways to use this concept of time value of money in our everyday lives.

Let's say you're trying hard to save for a vacation by setting aside \$100 per month, which is better Savings Plan A or Savings Plan B?

Savings plan A: invest \$100 at the end of the month, at the end of the week 4.

Savings plan B: invest \$50 at the end of week two and then another \$50 at the end of week 4. Notice we are still saving \$100 but doing it in installments as opposed to one lump sum.

Plan B is better because the \$50 invested at the end of week 2 will earn interest in weeks 3 and 4. Thus, in plan B, you will end up with something more than \$100 at the end of week 4. The power of compounding.

Here's another application. You're having a hard time saving for your vacation because you spend too much money and have racked up an outstanding balance of \$1,200 on your credit card. Which of the two payment plans is better, Payment Plan A or Payment Plan B?

Payment plan A: pay the entire amount, which is \$1,200 plus interest, at the end of the month, at the end of week 4.

Payment plan B: pay \$600 down at the end of week 2 and the remaining \$600 plus interest, at the end of week 4.

Plan B is better because by paying down a chunk of the amount due, you are decreasing the interest that you are charged on the outstanding balance.

Once again, we see the magic and the power of compounding.

Who says time travel does not exist? It certainly exists for money. The time value of money is a very important concept in our daily lives whether related to saving for the future or borrowing today and paying back in the future.

Budgeting Process

Your budget will help you keep track of the money you earn and spend so you can focus on your financial goals.

The most successful organizations in the world track their financial position to help them achieve their goals. I'm going to share some of the tools and tips from leading companies to help you build a budget that works for you in order to help achieve your goals.

The idea is to think about what you need and want today and compare that to what you need and want in the future with a focus on setting up specific steps that you can take today to get you to a financially successful tomorrow.

Let's start with some definitions.

What is a budget? A budget is an estimate of revenue (your income) and expenditures (your costs) over a set time period. Your income includes salaries, gifts, scholarships. Your costs include things like your mortgage payments, insurance premiums, food, and entertainment.

You have a surplus when income is higher than costs (you're living below your means) and a deficit when income is less than costs. Your goal is to have a surplus every month so you have a buffer in the short term and so you set yourself up for a successful future.

Emphatically, the process of sorting through the timing and amount of your income and expenses adds more value to your financial wellbeing and helps you achieve your goals than the final budget document, as important as that final budget is.

When creating budgets, companies often divide the budgeting process into three main phases: preparing, analyzing and deciding.

Let's start with the first phase: Prepare

On one page, write just a few words to describe where you stand today financially. Are you confident, positive, and excited, or nervous, behind, and unfocused? Then write one to three descriptors of where you would like to be soon (say, in 3-5 years), balancing ambition and realism.

Do you want to be on track, feeling good, automatically saving? This is your starting point and gives you a sense of where you are and where you would like to be.

Companies use a vision statement to help guide their budget decision-making and you might find this useful as well. Your vision doesn't have to be too formal or flowery, it could just remind you of your main budgeting goals, so your decisions eventually become obvious.

Now think about and write down what you think the biggest challenges will be to achieve your goals. They could be things like: I've got expensive hobbies, my friends make more money than I do, I have a spendthrift spouse.

Take a clear-headed look at the challenges you expect and your vision of where you want to go and think hard about how you will overcome those challenges. You don't need all the answers right now, but you do need to think of a few specific things you will do to address those challenges so you can realize your vision.

Now think about the information and data you'll need and how you'll collect it such as your after-tax income, realistic near-term promotion prospects, the timing of paycheques versus bills, what you owe, what you own, and so forth. You do not need to collect the information in this first phase of budget preparation, just think about what you need to pull together and where you'll find it.

At the end of this phase, you'll have a vision of your financial future, expected challenges and solutions, and a list of information you'll need for the next phase, analysis.

And now on to the next phase of budgeting: Analyze

In this phase, you'll gather the information you need to make clear, realistic, and fact-based decisions. You will calculate your total income and expenditures and know when money flows in and when money flows out, so you never find yourself surprised. How much fun does that sound?!

Log in to your bank account and download the last 18 months or so of deposits and withdrawals. Then download all transactions from your credit card statements for the same period.

Decide for yourself how you want to categorize your expenses - be as broad or granular as makes sense for your situation and goals. Maybe it's appropriate for you to just look at your average total credit card expense or maybe it would be better for you to get a detailed sense of how much you're spending on more granular categories like groceries, entertainment, travel, clothes, grooming, online purchases, subscriptions, and so forth.

Record how much money came in every month and separate by source if you have multiple income streams. Record how much you spent in total every month. Record how much you saved every month.

These are the facts that you're going to work from. Now that you've outlined your goals and looked at your cash in and cash out, we're ready for the third phase of this structured approach and that's the deciding phase.

Last Phase of Budgeting: Decide and Commit to Specific Action

Look back at the vision statement you made back in the preparation phase. Does it still resonate? If not, adjust it as needed and turn it into a sentence or two. It could be something like: I spend less than I make every month, yet don't feel like I'm making huge sacrifices. I have an emergency savings fund to carry me through 3 months of lower than expected consulting income. I make the maximum contributions to my RRSP and TFSA every year.

Now, look back at the list of challenges you expect to face and how you'll overcome them as you work towards achieving your above vision - have you thought of any other challenges or ways to get around them?

The decisions you make in this phase need to be based on your current reality: your current income, current expenses, current savings, current commitments, current plans. Do you have enough income for your basic expenses? Do you spend enough on personal development that will enable you to earn more or be healthier or whatever? If you were to prioritize the things you spend money on, would you even notice if you stopped spending on the lowest priority thing?

Some people think budgeting is painful and sometimes it can be. But if you have a goal of where you want to get to and you remind yourself how great it'll be when you get there, it can really help. It doesn't matter what your goals are; it's simply important to have them because it makes the process worth-while.

Key steps to take to get moving on your budget process

One technique that helps a lot of people is to focus on finding a few quick wins. These are easy things to accomplish. They can be done simply and it helps you create budgeting momentum.

Today, for your quick win start, list three things that you can do right away that will help you achieve your goals. An example could be to buy less of something you blindly spend money on that isn't that important to you. Or to check your bank fees and see if you could save money. Or cancel a membership or subscription you don't use. Or call your financial institution and get a complete understanding of your interest rates and fees.

The second technique that helps a lot of people with their budgets is to use key performance indicators to track their progress. Apply this to your own situation by identifying indicators you'll be checking as you measure your own progress. One example is how much money you have in your emergency savings account. Another example is whether you're trending downwards in how much you're spending monthly on something you've identified as not that important to you, such as restaurant meals.

The great thing about using consistent key performance indicators is that you can monitor your progress and catch yourself if you start trending in the wrong direction.

In summary, your annual budget is important because it allows you to see where you are financially today and whether you're trending in a financially healthy direction.

But a budget without a vision will be hard for you to get excited about. Make sure you review your budget throughout the year to adjust and track your progress. And don't forget to celebrate your successes!

3. Investing

HEATHER HOLDEN, PHD

The 'What': Products

Financial markets may look complicated with thousands of choices to invest in, but there is not that much you need to know to get started.

One of the things you do need to know is the difference between stocks and bonds.

When you buy stocks of a company, you own part of the company. You make money when the company does well and if the company does poorly, you lose.

And in the worst-case scenario, the company could go bankrupt and you would lose everything. That makes stocks very risky.

Bonds are IOUs. When you buy a bond, you lend your money to some institution that promises to pay it back with interest. There are many types of bonds. There are long-term bonds and short-term bonds, depending how long the loan is going to last. It could be as short-term as one month or as long-term as 30 years.

There are bonds issued by governments, meaning the government is borrowing your money and bonds issued by corporations, meaning the company is borrowing your money. But the idea is always the same; when you invest in a bond, you make money by receiving the interest that was promised.

It doesn't matter whether the company is doing great or just okay, if it's doing well enough to keep its promise to pay you interest, you receive the same income from your bond. Bonds with very short lifetimes, less than one year, are called money market securities. That's because they're almost as safe as holding cash in your wallet.

Bonds may promise a fixed income, but this does not mean that there is no risk. Long-term bonds are more risky than short-term bonds because a lot could go wrong over the long term. And corporate bonds are riskier than government bonds because while companies can run out of money and go bankrupt, governments can raise taxes to make sure they have enough to pay your money back.

Overall, bonds are a lot less risky than stocks because of the certainty you get with bonds.

So, why would anyone invest in stocks instead? The answer is simple; stocks offer the potential for higher returns to investors. Nobody knows what's going to happen in the future, but in the long-term history of stocks, they have a return of about 8% per year on average.

But to get this kind of performance, you need to accept the possibility of crashes and recessions when the value of your investment can drop 50% or more very quickly, as in the financial crisis of 2008-2009. Bond returns depend on interest rates. Interest rates vary over time depending on the economy.

But today, interest rates for U.S. and Canadian government bonds are in the 0.5% to 3% range depending on how long you'd like to invest. Far less than what you can expect from stocks.

If you want a good return, you've got to accept a greater risk of losing money. In other words, no pain, no gain, at least if you want a significant gain.

The How: 'Platforms'

So, how do you go about investing your money? One possibility is to open an online brokerage account and buy stocks and bonds yourself. Another is a new online brokerage category called RoboAdvisor in which an algorithm recommends your asset allocation and investments based on your answers to a questionnaire. And a third possibility is to give your money to professionals who will do the investing for you.

With all three of the above 'platforms' for investing, the investment products you buy could be individual stocks and bonds, or you could buy funds. Funds are companies that collect money from many people and invest on their behalf. But of course, they don't provide that service for free. They charge various types of fees. There are many types of funds, too many to mention now, but the most important distinction is between passive and active funds.

Active funds try to pick the best investments and avoid the worst ones; they also change their investments over time to try beat the average performance of the markets.

Passive funds, on the other hand, follow the market without trying to do better. Because this is less work, passive funds are a lot cheaper with expenses that can be as low as 0.1% per year or less, while active funds often charge around 1% or 2% per year.

The 'How Much': Diversification

If you were to look at the performance graph of individual companies over the course of a year, you'd see that their prices move up and down quite wildly, some more wildly than others.

But compare the wild movements of one company with the entire market and you'll see a smoothing effect when a whole bunch of companies are included. What you're doing is comparing one company to the 'index'.

One popular index used for performance and volatility comparison is the S&P 500 Index. What's the S&P 500? It's a number that tells us the performance of a portfolio that would include the largest 500 stocks in the U.S. market. It gives a pretty accurate picture of the performance of the overall U.S. stock market.

Some stocks do better than the index, some do worse. That is to be expected because the index gives us a sort of average performance across many stocks.

What is obvious is that the index is less volatile than most individual companies. Yes, the index moves up and down a lot, but typically the fluctuations are much smaller. And the range within which the Index moves is narrower.

Likewise, in a portfolio with many investments, some will do badly, and others will do well on a given day. The bad and good performers sort of offset each other. This is known as diversification and it's a way of reducing the risk of volatility.

Diversification is not going to eliminate every kind of risk. If there's bad news about the economy overall, the value of your portfolio is still going to go down.

And it's important to understand that diversification is not about increasing your returns. It won't help with that. But you won't have to live through as many periods of great volatility during which the on-paper value of your investment portfolio could be greatly reduced. This could mean that you'll be less likely to panic and make rash decisions to sell at the bottom for a loss.

So, how do you diversify in practice? There are thousands of stocks available for you to buy on the market. Unless you're a billionaire with a team of portfolio managers on staff, it isn't practical to purchase and manage a complex portfolio with that many stocks.

Another option is to buy index funds that do the above work for you. Your money is pooled or combined with other investors' money and invested in just about every stock on the market. These index funds have low annual fees because it doesn't cost the fund company much for set up and maintenance.

Of course, holding this type of portfolio means that you give up the idea of looking for stocks that are great deals, those that may grow a lot or because they're somehow under most investors' radar and sell for a cheap price. You accept that you'll own 'the market', the good and the bad together.

The truth is that you're probably not missing a lot.

The record of stock pickers, amateurs or professionals alike, is very poor. I am not saying that it is impossible to find good deals in the stock market and earn superior performance that way. But I am saying it is hard to do consistently. Most people who try to do that fail.

Note that it is not enough to invest in many stocks in economic sectors. If you want the maximum benefits from diversification, you need to diversify internationally and invest in stocks from other countries as well. The Canadian market is relatively small and concentrated in a few sectors. You cannot get adequate diversification by investing in Canadian companies only.

The When: Don't even try to Time the Market

No matter how great your diversification is, you should be realistic about what it can and cannot do. Diversification does not protect you against the market crashes that come occasionally. When there is a crash, almost all stocks go down and there are not enough stocks that go up to make up for the stocks that fall.

However, history shows that the market recovers from crashes. And there is no way to get comfortable returns in the long run without facing that risk. Diversification may not help much when the whole market is down, but it offers some protection against bubbles in a single sector of the economy

It would be a neat trick to always know the exact right time to buy at the lowest price and to sell at the highest price, but that's not exactly what we're talking about here. It's a reference to the tendency of some investors to get nervous when markets crash and sell after the price drops (which happens usually very quickly).

In the worst case, those same investors decided to wait until the markets were soaring and doing great before buying their investments. Those poor people bought high and sold low. Not a profitable habit.

It will be very easy for you to make the mistake above more than once in your lifetime if you are not vigilant and aware of the big picture. You cannot predict where the market is headed, but you can predict human fear and greed.

When you have money to invest, that's the time to buy; when you need money to spend, that's the time to sell.

The Controllable: Fees

One variable you can control to a large extent and which will have a major impact on your performance is your investment management expense. Costs vary widely between the different ways you can invest your money.

Consider that the typical actively managed mutual fund, the type of fund that tries to select attractive stocks could charge 2% per year in various expenses. Compare that to some index funds that charge less than 0.1 % per year.

Now, 2% might not look like a lot, but because of compounding, it makes a huge difference in the long term. Let's say that you have \$100,000 that you're going to invest in stocks and that you expect an average annual return of about 7%.

If you pay fees of 0.1% per year in expenses, you'll have about \$740,000 after 30 years. But if you pay fees of 2% per year, you will only have about \$432,000.

This is not to say that you should always pick the investment with the lowest fees. But you do need to be aware of the fees and make sure you are getting value for the fees you do pay.

In summary, questions to ask yourself about your investments include:

- Is my portfolio well diversified?
- How will I make sure I don't buy and sell based on the mood of the market?
- How will I make sure I stick with my plan and keep investing when things look bad?
- Am I minimizing my investment expenses?
- Will I remember to be cautious when everyone is overly excited about a hot sector or invention?

The Slightly Controllable: Taxes

Canadian residents generally pay income tax on all their income. Income tax is calculated on a progressive basis. A basic amount earned each year is income tax free. But beyond this basic amount, your income is taxed at progressively higher tax rates. The more you incrementally earn, the higher the tax you'll pay on each additional or marginal dollar.

Investment income is added to your salary, so the higher your salary or earned income, the higher the incremental tax will be on your investment income.

For example, if you earn a \$95,000 salary, any investment income would be added to this salary and be taxed at a 40% tax rate up until the next tax hurdle.

Consider this: Interest earned on investments outside your RRSP and TFSA is taxed. Interest saved after paying down debts is NOT taxed making it an advantage to pay down debt.

Unpaid credit cards and bank loans carry relatively high interest rates. Assume that I owe \$600 on a credit card that charges me a 14% annual interest rate on unpaid balances. How much would I save if I were to pay down that \$600 that I owe and how does the government view these interest savings?

If I paid off that \$600 bill with the 14% annual interest rate, I'd save \$84 of interest per year. The government doesn't view this \$84 savings as taxable income, so I don't pay tax. In a way, this is an effective 14% after-tax return on my money.

If you have cash and are considering whether you should pay off a debt or invest the cash, remember that the return you get from the investment has to be that much higher than the interest you're paying to compensate for the tax you pay on the investment income.

The Shelters: Registered Accounts in Canada

Any investment return analysis needs to consider taxes. Government plans exist that allow you to defer paying tax on investment income until a later date or allow you to never pay investment income tax at all. These plans exist to encourage us to save and invest by providing these attractive tax incentives.

There are two commonly used accounts or plans. First, a Tax Free Savings Account (TFSA) is an account in which your investment income is completely tax free. Second, a Registered Retirement Savings Plan (RRSP) is an account in which your investment income is tax free until a time in the future when you begin to withdraw money from the account.

Both the TFSA and RRSP are government 'registered' accounts. The government allows us to put maximum amounts of money each year into our plans. These eligible amounts can be invested tax free or tax deferred within the account. A nice feature of registered accounts is the ability to name a beneficiary, which has benefits for your estate planning.

The money you put into your TFSA or your RRSP can be invested in any of the following: guaranteed investment certificates or GICs, stocks and bonds, mutual funds, Real Estate Investment Trusts (REITs) and more.

Not only is investment income within the TFSA exempt from tax while you own the investments, but no taxes are paid when you take the money out of the TFSA either.

An RRSP allows you to contribute a certain amount of eligible salary income earned each year. This allows you to delay or defer the taxes that are payable on that income.

Like a TFSA, investment income in an RRSP is tax-exempt. However, unlike a TFSA, once money is taken out of an RRSP, you are fully taxed at your marginal tax rate in that year as if you earned that income as salary. Your after-tax benefit depends on your marginal tax rate in the year you make the contribution and in the year you make the withdrawal.

It's very important to note that your marginal tax rate in the year of withdrawal may be higher or lower than in your years of contribution, but most people assume they will be in a lower tax bracket in retirement when they begin to take money out of registered accounts.

The tax impacts on RRSP investments are complex and require careful calculations. Like the TFSA, the money you put into the account can be invested in guaranteed investment certificates, stocks and bonds, mutual funds, and other eligible investments.

In summary, when thinking about your own situation, consider that paying down debt provides an effectively high after-tax return, investments that have no tax lead to higher effective after-tax returns, and using TFSAs and RRSPs will provide higher after-tax returns when used effectively.

The Human Element: Behavioural Finance and Risk

In this section, I'll be discussing the role and importance of your behaviour when it comes to decisions you make for your personal finances, a topic known as behavioural finance. I encourage you to do a bit of self reflection on what kind of spender, saver, borrower and investor you are or could be, and what that might mean for you in terms of your decisions.

Behavioural finance lies at the crossroads of finance and psychology. The topic of behavioural finance is somewhat controversial. Not all academics and practitioners agree on how rational or irrational people really are with their finances. It's obviously quite difficult to get inside the mind of someone and understand exactly why they act, think and feel the way they do. And when it comes to an analysis of financial markets, it's problematic to prove a cause and effect relationship.

With that said, let's move on to the first topic: what kind of investor are you? This is, of course, a very broad question. But in thinking about this question, one important factor to consider is your level of risk aversion. In other words, how much do you dislike risk and uncertainty when it comes to your finances?

Generally, we think that investments should be priced in such a way that the greater the riskiness of the investment, the greater the expected return on that investment should be to compensate investors for that higher risk.

So, what's your level of risk aversion? If you're having trouble answering that question, that's not surprising. It turns out that assessing risk aversion, even your own, is very difficult. And there's no real scientific way to go about it either.

There are, however, a few factors that affect people's level of risk aversion and thus how much risk they would want to take with their investments. These include age, personal and financial situation, liquidity needs and, finally, personality.

All else being equal, wealthy investors could afford to take on more risk because if their investments happen to do poorly, they'll probably still have enough money to fall back on and live decently. Then again, some wealthy people conclude that they don't need to take risks in order to make more money because they have enough, therefore they choose to be low risk investors.

Looking at two investors who have the same level of wealth, one typically assumes that the younger investor can afford to take on more risk. The idea is that the younger investor, if faced with a poor investment return, has more flexibility in terms of adjusting their spending habits and may also be better able to rely on future employment income to support their needs, something that an older or retired investor may not be able to do.

Considering your personal and financial situation, if you have a mortgage or you're just barely making your rent payment, you may not want to take on risk in other parts of your financial life such as risky investments.

Your personality plays a role in determining your optimal level of risk exposure. Some people naturally tend to worry more than others and not everyone has the stomach to invest in risky securities. On the other hand, some people may in general not worry enough or may be overconfident such that they take on too much risk for their own good.

Note that each of these factors can change over time and thus investors should periodically re-evaluate their personal situation as conditions change to ensure that they're still taking the right amount of risk.

Not surprisingly, people have a strong emotional connection to their money and one of the goals of this section is to help you understand how your emotions can sometimes negatively affect your investment decisions.

There are several interesting behavioural biases to watch out for.

Some people underreact to news and others overreact to news about the economy and the financial markets. Some people think they see patterns that may not even exist and jump to conclusions. Some people tend to sell investments that have performed well and hold investments that have performed poorly, taking profits too early on the good ones and being in a state of denial about the bad ones.

A particularly disconcerting bias we all have very likely succumbed to is called self-attribution. This would apply to a situation in which you take credit for an awesome investment decision that really was just good luck but blame the world for a failed investment thinking you're the victim. This is a dangerous bias because it can lead to overconfidence. And overconfidence might cause investors to take on more risk than they should.

The final psychological issue to be aware of is related to the emotion of fear. Being in a state of fear, even if unrelated to financial markets, can have an impact on your attitude towards risk and presumably your investment decisions. Therefore, avoid making important financial decisions when you might be in a state of elevated fear or experiencing any other intense emotions.

4. Real Estate

HEATHER HOLDEN, PHD

REAL ESTATE

Here, I'll discuss the fundamentals of real estate investing along with some ways to get involved in the real estate market. I'll start by discussing the important factors to consider for real estate investment. Then we'll look at issues related to housing affordability and the rent-versus-buy decision. Finally, I'll discuss ways for you to participate in the real estate market without (or in addition to) a huge commitment like buying a house.

Why Real Estate?

Most obviously, if you own your property, you don't pay rent to someone else. If you're a landlord, you're able to generate income every month with the rent you collect. Also, real estate has the potential of capital appreciation.

In addition, real estate gives people a sense of security since there's the brick and mortar underlying each investment. And then there is the benefit of being able to access borrowed money relatively easily to buy real estate.

Finally, real estate can serve as a hedge against inflation because rent and real estate values tend to go up with increases in inflation.

If you want to invest in real estate, there are several factors to consider.

Location, location, location!

But what is a good location? First, you look at the population and income growth of a city. You want to go into a market with a growing population because a growing city typically demands more housing and that would help you to secure tenants for an investment property and to ensure you have a stable stream of rental income.

Also, the typical increase in housing demand in growing cities can translate into housing capital appreciation (also known as inflation though, from the other perspective), so that helps you when you're ready to sell. While population is important because people need housing, you will also want people to be able to afford and sustain the housing market. Hence, locations with a financial business centre and money circulating tend to have a better housing market.

Quality of life is also an important location factor. The city must be a good location with respect to low crime, good environmental conditions, and decent education among other factors.

Macro Factors

In addition to location, macro economic factors matter a lot for the timing of real estate investments. For instance, when the mortgage rate is low, your cost of real estate is lower. When banks have more money and are more willing to lend, it would be easier for you to get a mortgage for your property.

If you look at the relationship between interest rates and home prices, they tend to go in opposite directions. This means that investors are more likely to invest in real estate when interest rates are low, which in turn drives up housing prices thanks to supply and demand.

Another macro factor is that house prices are influenced by the constraints of geography. Some good cities end up being ultra expensive because of these natural constraints. If there is limited opportunity for the city to expand geographically, due to water or mountains for example, there is a natural limit of the land on which housing can be built. As a result housing tends to be more expensive.

On the other hand, even for thriving, growing cities with a vibrant financial centre, if there is a lot of surrounding land allowing the housing supply to expand outward, housing prices will be relatively low.

Micro Factors

In addition to location, macro economic factors matter a lot for the timing of real estate investments. For instance, when the mortgage rate is low, your cost of real estate is lower. When banks have more money and are more willing to lend, it would be easier for you to get a mortgage for your property.

First is the up-and-coming neighbourhood. The housing in these neighbourhoods usually sees capital appreciation, perhaps due to a new employer moving in or simply consumer demand for the characteristics of the neighbourhood.

Second is the established neighbourhood. Real estate investments of this type usually don't provide huge capital appreciation, but properties located here can have strong and stable rental income streams.

Next, you'll want to consider the right property type for your real estate investment that considers the current and expected future demand. For example, if the demographic data indicate many young singles in the area, it may make more sense to invest in an apartment rather than a house to maximize rental demand.

Lastly, the property itself matters. You know you need to find a good property, but what is considered good? First, the price must be right for the size of the property. You want to invest in properties that are not expected to have significant maintenance needs. You also may want to consider unique and interesting properties, as the value could be strong over time precisely because they're unusual.

Housing Affordability & Rent vs Buy Decision

The concept of housing affordability generally refers to the relationship between your housing expenditure and your household income. The guideline is between 28% to 36% which means if you're spending more than 36% of your income on housing, then your housing investment spending is too high.

The simplest benchmark measure of housing affordability is the median house price-to-income ratio.

If you look at the median house price-to-income ratios and the median rent-to-income ratios of the four largest cities in Canada (Toronto, Vancouver, Montreal and Calgary), you'll see that both ratios are significantly higher for Vancouver and Toronto. What does that mean? It means housing is expensive and unaffordable compared to income levels earned in these cities. This is not new news.

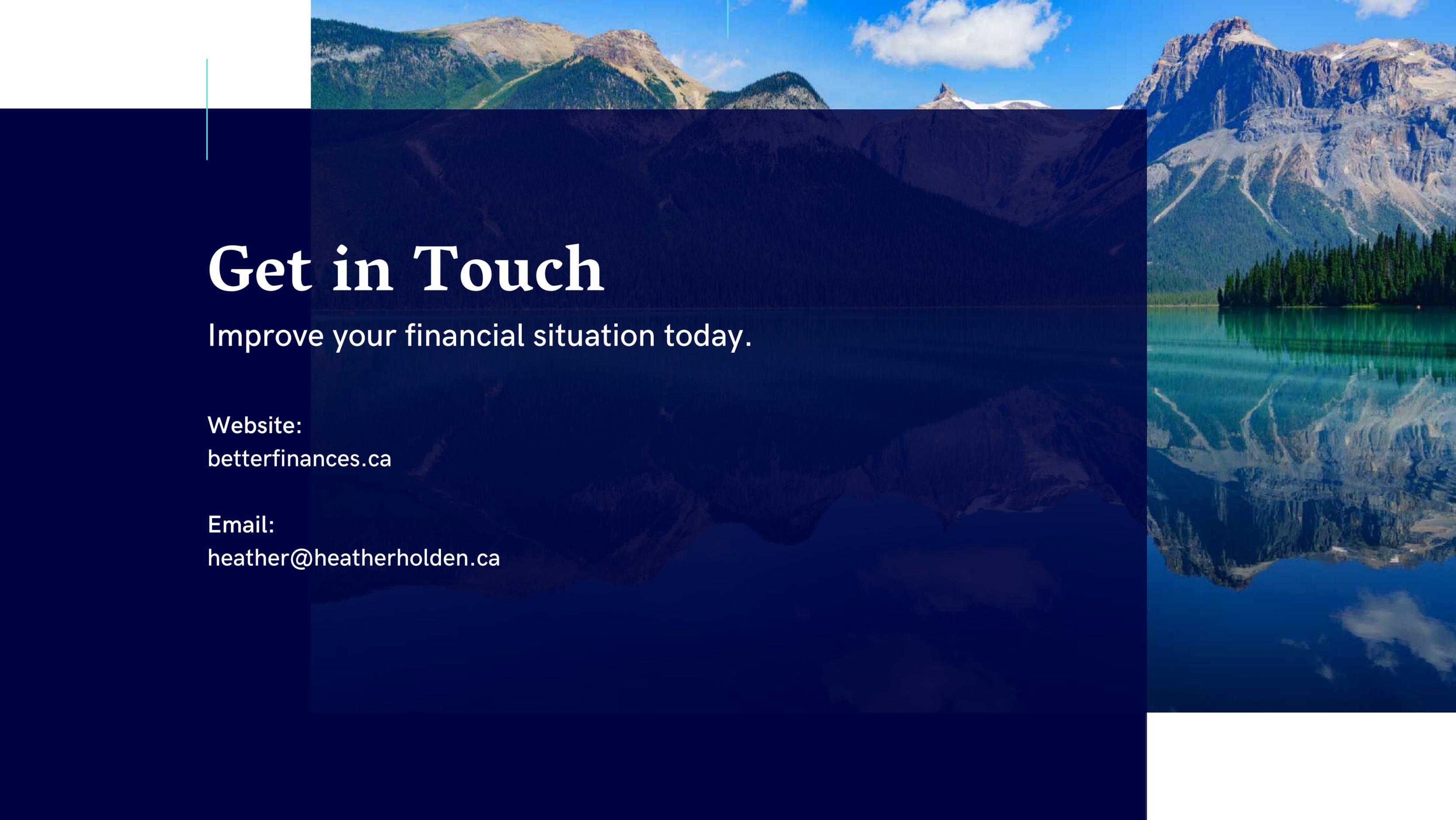
But regardless, you've still got to live somewhere and an important life decision for most people is whether to rent or to buy. One element of your decision is the price-to-rent ratio in which you divide the approximate house price of real estate you're considering by the annual rent you'd pay otherwise.

When the ratio is high, it means house prices are high compared to rent and it means it's more beneficial to rent than own. Most real estate investment firms suggest that the tipping point for this ratio is 20.

For example, if the condos you're considering cost around \$400,000 and you're currently paying \$2000 per month in rent, your ratio is about 17 ($400,000/24,000$), so that factor indicates you would be wise to buy a condo rather than rent.

A detailed analysis of the rent versus own decision would require other information such as other housing expenses, the amount of down payment you have, and the time horizon of your real estate investment.

Let's say you've concluded that owning is currently too pricey for you because you also do not yet have a large enough down payment. One consideration is to invest in real estate investment trusts (REITs), which are companies that buy and hold real estate properties for rental income. There are hundreds of REITs traded on stock exchanges, some focusing on specific property types such as office buildings, industrial complexes, retail centres, multi-family apartments and so forth, and you can buy units of REITs like you would for any other stock.



Get in Touch

Improve your financial situation today.

Website:

betterfinances.ca

Email:

heather@heatherholden.ca