



Fun-damentals Workbook

Making finance a little more interesting

**financial
pipeline**

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Life Beyond School



Housing

A home is more than four walls and a roof. Housing can provide a sense of safety, stability, and belonging. For a majority of people, buying a home is one of the biggest investments they will make in their lifetimes – but whether this investment leads to financial security largely depends on whether they fully understand how their mortgage fits holistically into their lifestyle. Staying informed about the options available to you as a first-time home buyer, knowing the difference between fixed and variable interest rates, and understanding down payments will help you make the right choices, save money, and make your homeownership journey a financially sound experience.

READING MATERIALS



Incentives for First-time Home Buyers



Fixed or Variable?



How Bond Yields Drive Fixed Mortgage Rates



How Down Payments Affect How Much Interest You'll Pay



Buying a Home?
Let's Talk Down Payment

Q&A

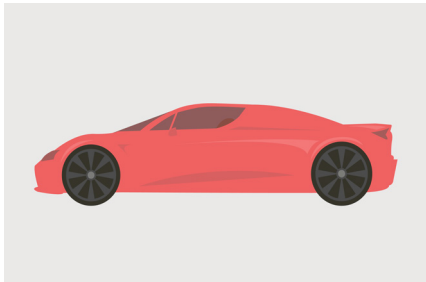
1. What is a down payment?
2. If you want to buy a Canadian property that costs \$400K, what is your down payment?
3. If you want to buy a Canadian property that costs \$1.1 million, what is your down payment?
4. Up to what percentage of your purchase price can you contribute to your down payment?
5. What kind of relationship exists between bond prices and interest rates?

Answers: (1) A lump sum of money paid upfront for goods or services (2) \$20,000 (3) \$85,000 (4) 20%
(5) An inverse relationship

Saving Accounts

It doesn't matter if you're 18 or 58; saving money for the future is always good! The earlier you start creating saving habits, the better off you'll be when you're ready to retire. Having enough money to retire well doesn't just happen overnight. It takes years of planning, investing, and adding to the piggy bank. It also helps to know which saving options make the most financial sense for your life, and how much money you'd need in case unexpected expenses came up.

READING MATERIALS



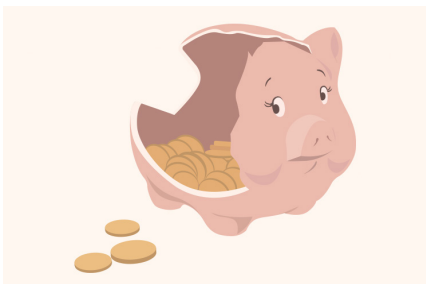
Explained: Top Canadian Retirement Planning Vehicles



TFSA vs RRSP



When Should I Start Collecting CPP Payments?



How Much Do I Need for an Emergency Fund?



What's the Canada Pension Plan?



Household Budgeting: Cash is King

Q&A

1. It's the year 2022 and you just turned 18. How much can you contribute to a TFSA?
2. What is the CPP?
3. You're 19 and have had a summer job earning 16k but have neglected to file taxes. How much can you contribute to your RRSP?
4. How much should be in your emergency fund?
5. If you will turn 18 in December of 2019, and it's currently January of 2019, can you still invest in a TFSA?
6. Is the money you put into your RRSP tax-deductible or after-tax money?

Answers: (1) \$6,000 (2) The Canada Pension Plan is a government-backed pension program that provides an income to retirees. (3) Nothing (4) It should ideally contain the equivalent of between three and six months of income (5) No (6) Tax-deductible

Investing

Starting to invest is exciting. It feels like you are taking control of your life by putting your money to work for you. But all investments have associated risks; there is no sure thing or magic tool that will duplicate your money overnight. Learning about investing will help you understand the risks and rewards of an investment and make prudent investment decisions. For example, how do rising interest rates impact your investments? Why is asset mix important? Or, why do financial markets go up and down? The answers to these questions are crucial building blocks to getting started in the world of investing.

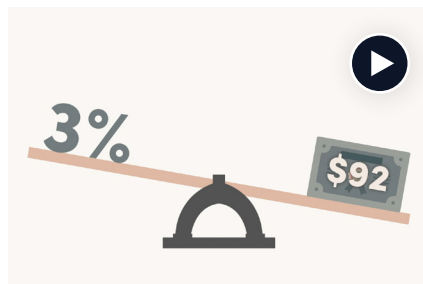
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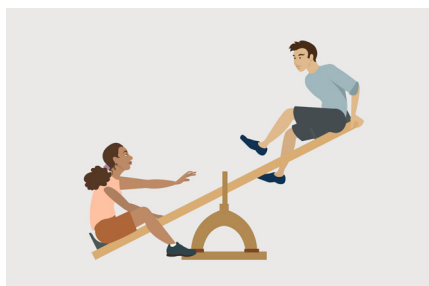
Why is Asset Mix So Important?



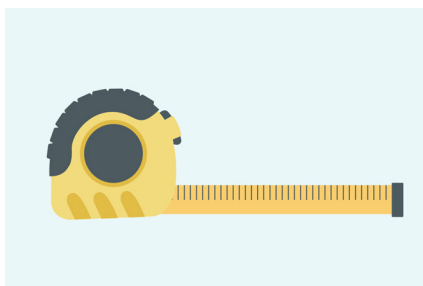
How Do Rising Rates Impact Investments?



What Happens to Bond Prices When Interest Rates Rise?



Why Do Financial Markets Go Up And Down?



The Price Earnings Ratio, a Useful Measure for Stock Valuation



Why Do Stock Prices Change?

Q&A

1. What happens to bond prices when interest rates go up?
2. A diversified asset mix breaks down into what 3 categories?
3. What ratio is inversely related to interest rates?
4. Why is the price-to-earnings ratio important?
5. Is 0 a good P/E ratio to have?

Answers: (1) Bond prices fall (2) Cash, fixed income and equities (3) Price-to-earnings ratio (P/E) (4) It tells how a company's stock price stacks up against its earnings & also indicates how optimistic – or pessimistic – the market feels about the firm's future growth prospects (5) It's not good to have as a P/E ratio of zero can signal that the company is a money losing company.

University Financing

There is evidence that earning a post-secondary education greatly improves your employability and your lifetime earning potential. But school can be really expensive. A lot of Canadians need financial support to attend post-secondary school. In Canada, a federal program partners with the provinces and territories to help students pay for their post-secondary education. Getting a loan through these programs makes school more accessible for everyone, but it's important to understand how the loan works, how interest builds on your loan, and how to repay it.

READING MATERIALS



How Do Student Loans Work?



How to Apply For OSAP

Q&A

1. Who can apply for OSAP?
2. Where can you access your loan repayment information?
3. How can one access student lending in Canada?

Answers: (1) OSAP is open to Ontario residents who are Canadian citizens, permanent residents or protected persons, and who are attending an OSAP-approved program and school (2) Where can you access your loan repayment information? It's compiled through the National Student Loan Service Centre - not OSAP. (3) In Canada, student loans are offered by both provincial and federal government entities

Finance



Income Management

Can you weather a financial crisis? It can be stressful for even the most experienced or financially savvy individuals. But whether you're just starting to manage your own money, or you have a business and are facing the possibility of bankruptcy, knowledge gives you an upper hand! Knowing how to move from savings to income, understanding how interest rates work, and learning how to protect your business from bankruptcy can help you better manage your income and weather tough financial times.

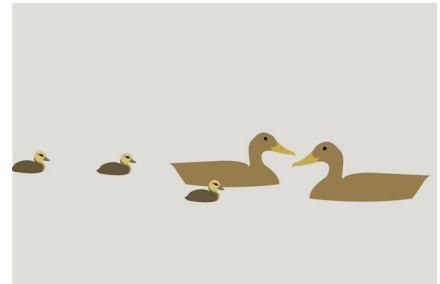
READING MATERIALS



From Savings to Income: What You Need to Know About RRIFs



Bankruptcy Protection: a Chance to Restructure and Survive



What is Bankruptcy and What is the Alternative?



Steps to Weather a Financial Crisis



The Big Mac Index and the Rise Of Burgernomics

Q&A

1. What does the Big Mac Index tell us?
2. How many countries use the Big Mac Index?
3. How do you get the “implied” exchange rate between the countries using the Big Mac Index?
4. How do you get a registered retirement savings income fund (RRIF)?
5. Is the money you withdraw from a RRIF tax-free?

Answers: (1) It tells us how much goods and services would cost if countries transacted in the same currency
(2) More than 80 (3) You divide the price of a Big Mac in one country by the price of a Big Mac in another country
(4) An RRSP must be collapsed and converted to a RRIF (or registered annuity) by the end of the calendar year in which the account holder turns 71 (5) No

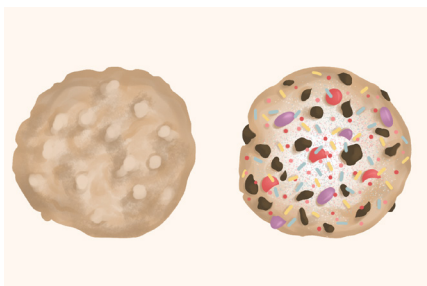
Investing

A lot of people say “fake it ‘til you make it.” But, in the world of investment, “faking it” is probably one of the worst strategies for making sound financial decisions – and positive returns. So if you don’t know, you’d better learn! It is crucial to understand bond market terminology, the difference between value versus growth investments, and why duration matters as you begin exploring more complicated investment options.

READING MATERIALS



Why Duration is Crucial
as Interest Rates Rise



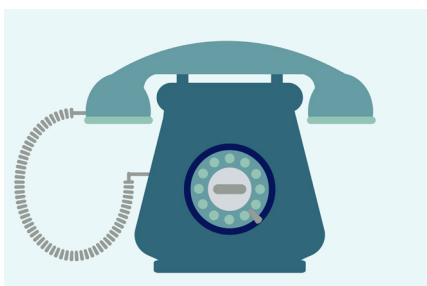
What Role Can Alternatives Play
in a Portfolio?



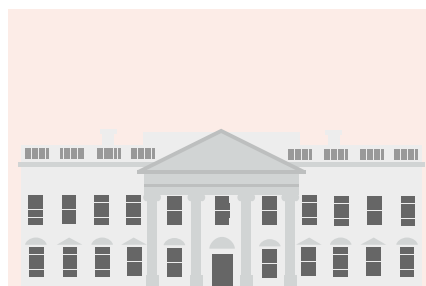
Bond or Bond Fund?



The Value vs Growth Debate
Wages on



Calls And Puts:
Put-call Parity – Options Basics



What are the Main Types of
Bonds?



Bond Market Terminology

Q&A

1. Which is considered safer – bonds or stocks?
2. How can investors use put-call parity to protect their position in down markets?
3. Which is riskier, bonds or alternative investments?
4. What is a bottom-up portfolio management style?

Answers: (1) Bonds (2) Through arbitrage techniques (3) Pretty much anything that is not a stock or bond (4) Managers who analyze individual companies, not markets or trends, and invest in specific bonds based on the risk profile of the issuer and risk versus potential reward for each bond.

Banking

Banking systems are not isolated. Everything Canada's central bank does (including monetary policy) is part of a larger economic ecosystem and must balance keeping to their mandate with reacting to world-wide market forces and events. The decisions the Bank makes permeate throughout society and affect all our financial institutions. Each decision has consequences on a larger scale, but on a micro scale, it affects what is in your pocket (or more accurately your bank account). Understanding the meaning of recession, why interest rates rise and fall, and how financial markets use benchmarks to determine the cost of securities and bonds can better help you understand what is happening financially in the world around you.

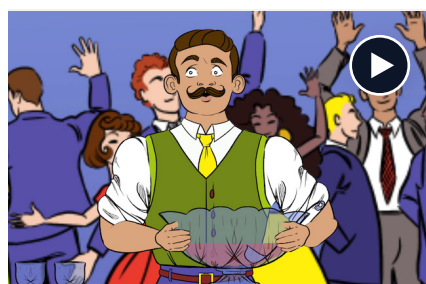
READING MATERIALS



What is a Recession and Why Are They So Feared?



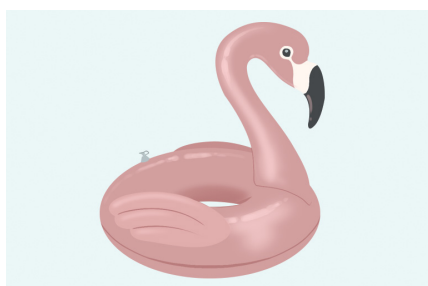
What Do CDOR And CORRA Mean?



Monetary Policy and the Central Bank



Four Ways Interest Rate Changes Affect You



What Makes Interest Rates Change?



Understanding Interest Rates

Q&A

1. What are the 3 components of interest rates?
2. How are interest rate shifts affected by credit?
3. What is CDOR?
4. What are two Canadian dollar-based lending metrics?
5. What is the Risk-Free Rate?

Answers: (1) The risk free rate, the risk premium, and the inflation premium (2) Trick question, they're not (3) It's the rate at which banks commit to lending to companies (4) CDOR & CORRA (5) It is the rate of return an investor would expect from a risk-free asset or one with zero associated risk of loss.

Credit

Are you worthy of credit? Should lenders trust you with their money? How likely are borrowers to default on their loans? Assessing credit risk and credit worthiness is a central part of the way our economy works. Credit ratings determine whether someone can get a loan to buy a car or a house, how much borrowing that money will cost, and how risky certain investments are (the housing market, for example). Understanding how credit works will help you build your own credit and make prudent borrowing decisions.

READING MATERIALS



How to Read Your Credit Card Statement



Manage Your Credit Now to Ensure Good Mortgage Rates



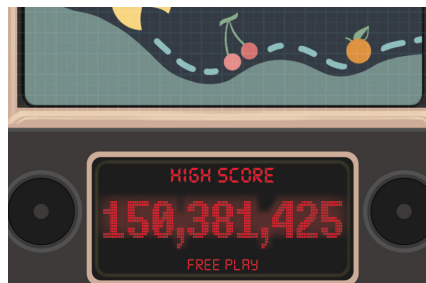
Why are Credit Card Interest Rates So High?



Credit Rating and Analysis



What is Credit Risk?



Credit Rating: How to Raise Your Credit Score

Q&A

1. How can you access your credit records?
2. What does credit risk refer to?
3. The lower the _____ , the higher the interest rate or yield necessary for an issuer to pay.
4. What do investors use to rate issuers' ability to repay their debts?
5. What is one way you can increase your credit score?

Answers: (1) Online, through your mobile banking app or via the bank's phone number (2) Refers to the possibility that a loan or bond won't be repaid as scheduled, or at all (3) Quality (4) Credit ratings (5) Using your credit card instead of your debit and ALWAYS paying off the full amount if you can

Functions of a Business



Supply & Demand

What goes up, must come down. That's a rule that applies way beyond physics. In finance, it's not a terrible analogy to describe the relationship between supply and demand. The one influences the other until they create a balance. This relationship affects everything: how much (or how little) money is in circulation, the value of that money, whether the price of gas keeps going up, whether central banks make changes to fiscal and monetary policy – and why all that matters, not just in a theoretical sense, but in a practical everyday kind of way.

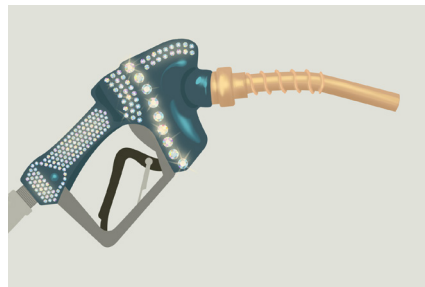
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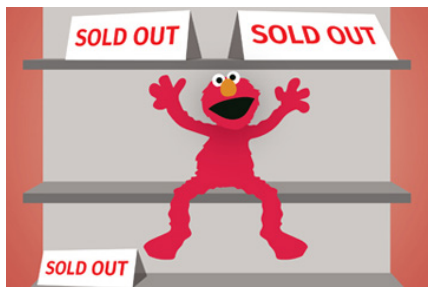
What is Monetary Policy?



What is Fiscal Policy?



What Drives Gas Prices?



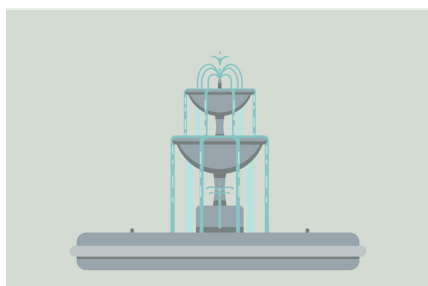
Tickle Me Elmo Economics



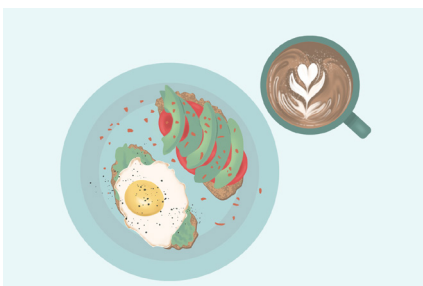
Why Do Oil Prices Change?



What is Fiat Currency?



Game of Liquidity:
Why the Flow of Money Matters



What's Causing Rising Food Costs?

Q&A

1. What is liquidity?
2. What 3 basic functions does money serve?
3. What components does the retail price of gas incorporate? And which component affects the price of gas the most?
4. What does fiat money's value depend on?
5. What is fiat money?
6. What are the most crucial factors that influence oil prices?
7. Which way does oil trend when demand is slower than supply?
8. What is commodity money comprised of?
9. What is the goal of monetary policy?

Answers: (1) Liquidity refers to how easy it is for an asset to be sold for cash (2) As a medium of exchange, as a unit of account and as a store of value (3) 1. Cost of crude oil, 2. Refining costs and profits, 3. Distribution and marketing costs and profits, 4. Taxes. The component that affects the cost of gas the most is the cost of crude oil (4) Supply and demand (5) It's money that has no intrinsic value and is government-issued currency backed by the same government that issued it (6) Supply and demand, storage capacity 7) Downwards in a straight line (8) Precious metals such as gold and silver (9) Macroeconomic stability

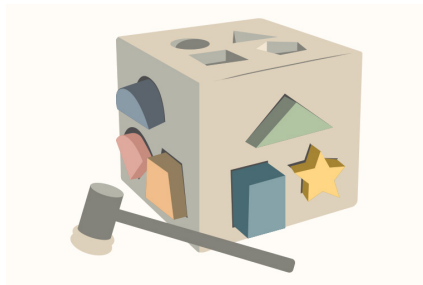
Accounting

For every worker, every household, every business, and every economy, balance sheets need to add up. In Canada, the CRA makes sure that everyone pays their fair share of taxes, checking that what your employer pays you, what you pay in taxes and what you keep all balances out. Accounting (at all levels) makes that balance clear. But accounting goes beyond taxes, and plays a part in how businesses and investors behave. For example, compliance standards make sure that businesses and investments play by the rules and maintain investor confidence in the markets.

READING MATERIALS



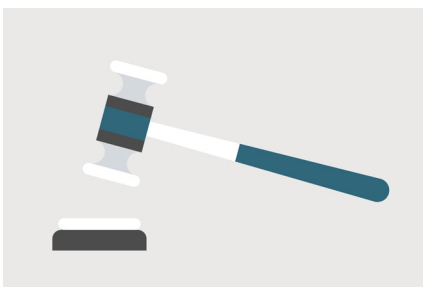
Breaking Down Bank Balance Sheets



Learn How Different Types of Investments Are Taxed



How Taxpayers Can Make Amends With Canada Revenue Agency



What is Financial Compliance?



Can Captain America Get a Bank Loan?



Investment Tax Strategies



Year-end Financial Checklist

Q&A

1. What reporting standard do public Canadian companies have to report under?
2. What program do you use if you make a mistake when filing your taxes?
3. What does the NIM — net interest margin — metric measure?
4. Who is the main enforcer of the market law in the U.S.?
5. What is financial compliance all about?
6. What are some requirements in order to be able to qualify for a loan?

Answers: (1) IFRS – international financial reporting standards (2) The VDP – voluntary disclosure program (3) It measures the difference between what a bank earns on its investment returns on assets less the cost a bank pays on its liabilities (interest expenses) divided by the average earning assets (4) The U.S. Securities and Exchange Commission (SEC) (5) It's about making sure a company follows the rules and is meant to maintain investor confidence to make sure the markets are efficient, transparent and fair (6) A credit score within a certain range, a credit history, a domestic bank account, proof of income and/or steady employment, residency in the country in which you are applying for a loan, be the age of majority in your country of residence

Entrepreneurship

Entrepreneurs face many challenges in running a new business. It is life-altering and consuming. But it can also be extremely affirming and rewarding. Knowing where to find good advice, how to raise money to make an idea take shape, and how to bootstrap your business can help you avoid the pitfalls that make many new startups fail. For those who love entrepreneurship, investing in new businesses is also a great way to make money. They need to have the passion, the drive, and an accurate sense of what they're buying into.

READING MATERIALS



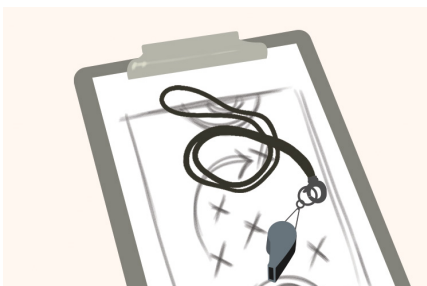
Why Do Most Startups Fail?



Bootstrapping, Angel Investors, and Venture Capital: How Startups Raise Money



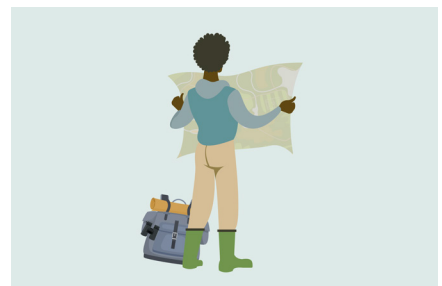
What is Product Market Fit?



How Do Startups Get Good Advice?



What is a Startup?



What's Involved In Being a Venture Capitalist?

Q&A

1. What are 4 main reasons startups fail?
2. What are the 3 categories that good advice for startups would fall under?
3. What is the main thing you have to focus on when launching a startup?
4. What are you called when you raise money from individuals, including friends and family?
5. Companies with large negative free cash flow are preparing for one of two things. What are they?

Answers: (1) Run out of cash, weak management, demand hypothesis was wrong, product was wrong (2) 1. Relevant 2. Level "skin in the game" (risk) 3. Specific (3) You need to focus on making something that somebody would want to buy (4) Angel investor (5) They're preparing to raise funds or they are in the process of raising money