# TABLE OF CONTENTS

**Alternative Investments** ........................... 3  
Defining alternative investments ................... 4  
  Alternative assets ................................. 4  
  Alternative strategies ............................ 4  
  Liquid alternatives ............................... 6  
  How liquid alternatives work ...................... 7  
Are liquid alternative funds suitable for you? .... 8

**Glossary** ............................................. 9  
Absolute return ...................................... 9  
Cash borrowing ...................................... 9  
Correlation ........................................... 9  
Derivatives .......................................... 9  
Forward contract .................................... 10  
Futures contract ..................................... 10  
Options .............................................. 11  
  Call option ....................................... 11  
  Put option ....................................... 11  
Short selling ......................................... 12  
Swaps .................................................. 13  
  Credit default swap ............................... 13  
  Interest rate swap ................................. 13  
  Total return swap .................................. 14
In recent years, markets across the globe have become increasingly difficult to navigate as macroeconomic conditions and geopolitical issues present greater challenges. As a result, markets are now more volatile than ever and investors need better ways to grow their wealth while effectively managing risk. One way to enhance risk-adjusted returns in a portfolio is to add alternative investments.

Whereas traditional investments include stocks, bonds, and cash, alternative investments include commodities, real estate, private debt, derivatives, infrastructure and certain strategies employed by hedge funds. A potential drawback of alternative investments is “illiquidity,” which means there isn’t always a market for investors to readily buy or sell such products. This can be risky if, for example, you need to sell your investment now but have no buyer available.

On the other hand, mutual funds are examples of “liquid” products that provide a ready market for you to buy or sell. Complex and sophisticated alternative investments were once available only to institutions or high-net-worth individuals. With the launch of liquid alternative mutual funds, it’s the best of both worlds: retail investors gain access to the potential benefits of alternative investments while being able to easily make trades.

Asset managers and investors, particularly institutional investors in Canada, have recognized that the value of alternative assets and related products has continued to increase. As shown in Figure 1, Canadian-managed alternative assets have more than doubled from $93 billion in 2012 to $212 billion by December 2017.

![Figure 1: Canada: Externally-Managed Alternative Assets (in Billions)](image)

This educational guide is designed to help you gain a better understanding of alternative investments. In addition, the guide will introduce you to the benefits of this increasingly popular asset class through a liquid structure like the mutual fund.

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1 Strategic Insight, Managed Money Advisory Service as of December 2017. This data accounts for all alternative strategies which include hedge funds, real estate, private equity, and infrastructure.
Defining alternative investments

As the name suggests, alternative investments represent an “alternative” way for investors to diversify their portfolios away from their longstanding reliance on traditional stocks, bonds, and cash. Stronger diversification offers the benefits of potentially generating higher returns, reducing volatility in a portfolio for a smoother and less-stressful investment experience, and preserving capital over a longer-term horizon.

For the purpose of this guide, alternative investments will be defined using two concepts: alternative assets and alternative strategies.

Alternative assets

The first group of alternative investments — alternative assets — is composed of physical and real assets, held either directly or indirectly. The value of these alternative assets is generally uncorrelated or less correlated to traditional capital markets (i.e., their performance tends not to move in step with these traditional markets, which provides better diversification). Examples may include commodities, currencies, infrastructure projects, vacant land and developed real estate (see Figure 2). This category also encompasses special-purpose securities, such as a real estate investment trust (REIT) that owns commercial property; fixed income securities issued by businesses that are established to own, develop and manage infrastructure assets; and units of special-purpose funds that invest in infrastructure projects, such as port facilities and airports.

There are also holdings that are typically underrepresented within standard investment portfolios and can, therefore, be viewed as alternatives to traditional stocks and bonds. These include non-traditional forms of debt, such as asset-backed securities, leveraged loans, floating rate loans, and inflation-linked bonds, as well as other strategies that seek to isolate credit risk versus general interest rate risk. Non-traditional strategies may also focus on equity sectors that have lower correlations to traditional large-capitalization equities. These may include micro-cap equities, preferred shares, and other specialty equity vehicles.

Figure 2: Examples of Alternative Assets

<table>
<thead>
<tr>
<th>Commodities</th>
<th>Crude oil, gold bullion, livestock and agricultural products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currencies</td>
<td>United States dollar (USD), Euro (EUR), Pound sterling (GBP), Japanese yen (JPY), Australian dollar (AUD), New Zealand dollar (NZD), Canadian dollar (CAD), Swiss franc (CHF), Norwegian krone (NOK), Swedish krona (SEK)</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Airports, toll roads, small hydro-electric facilities</td>
</tr>
<tr>
<td>Land</td>
<td>Agricultural, timber</td>
</tr>
<tr>
<td>Real Estate</td>
<td>Commercial buildings, condominium rental units</td>
</tr>
</tbody>
</table>

“Investments of passion,” such as precious stones, wine, antiques, and art, are also considered to be alternative investments, but they fall outside the scope of this guide as these investments are extremely illiquid and cannot currently be accessed through a financial professional.

Alternative strategies

The second group of alternative investments is represented by alternative strategies (see Figure 3). In these strategies, investment vehicles are structured to hold a wide range of financial assets — both traditional and non-traditional — but are managed using non-conventional methods.

Traditional “long-only” portfolios hold securities that you own outright, and you make money by selling these securities at a higher price than you bought them. With alternative strategies, there are fewer restrictions on liquidity, foreign currency exposure and trading, securities lending, leverage, and short selling (see below for more about the latter two strategies), to list a few examples. Common alternative strategy vehicles include hedge funds, which are usually available only to accredited investors, such as institutions and individuals with sufficient capital.

Hedge funds are comparatively less liquid than mutual funds, however, as they typically require investors to hold their positions over a set period. Compared to mutual funds, they also have few restrictions on their ability to borrow money to earn returns. Although these vehicles have historically had relatively high fees and unreliable performance, it has been estimated that the total global hedge fund market was USD $3.6 trillion at the end of November 2017, with investment inflows in that year of approximately USD $49.5 billion as of November 2017.²

Managers of alternative investment strategies can make greater use of two main tools: short positions and leverage. Using these tools can achieve greater diversification by creating portfolios with risk/return characteristics that differ from typical investments in stocks and bonds. Let’s look at both tools.

Using Short Positions in a Portfolio

The ability to profit when a security falls in value is the essence of short selling, and it provides portfolio managers with greater flexibility to deliver performance from an asset class in a variety of market environments. As the opposite of a long-only portfolio, short selling involves borrowing securities and selling them immediately in

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² Knight Frank, Wealth Report, 2015
³ The 2018 Preqin Global Hedge Fund Report
the market. If the value of these securities declines, then you can buy them back at a lower price than you had bought them, return them to the lender and keep the difference in value as profit.

It’s important to understand that investing in these types of alternative strategies and tools subject the investor to a variety of risks. For example, the risks of short selling include having no assurance that the borrowed securities will decline in value during the period of the short sale. If securities that are sold short happen to increase in value rather than decline in value as the short-seller had anticipated, it will result in a loss. Mutual funds that engage in short selling may experience difficulties in purchasing and returning borrowed securities if a liquid market for the securities does not exist at that time. In addition, a lender may require that borrowed securities be returned at any time. As a result, a fund may need to purchase such securities on the open market at an inopportune time.

**Using Leverage in a Portfolio**

Leverage gets its name from physics: levers are simple machines used to create a force advantage between the load and the effort required to move it. In the context of investing, leverage (created by adding debt to the capital structure) is used to try to generate enhanced returns for a company’s shareholders. Similarly, leverage in portfolios is the use of borrowed money or derivatives (i.e., financial instruments where the value is derived from/linked to the price of a given underlying security, such as a stock) to increase the potential return on invested capital. Leverage, however, is two-sided. It typically magnifies both gains and losses.

**Leverage can be introduced to a portfolio in three main ways:**

- Cash borrowing
- Physical short sales
- Derivatives

Using shorting and leverage allows portfolio managers to create more precise beta exposure and risk/return characteristics of a portfolio. Beta is a statistical measure of how volatile a stock is relative to the stock market at large, usually as represented by a specific market index. These tools also allow managers to create portfolios with expected returns that are uncorrelated to other traditional investments in stocks or bonds.

As with short selling, leverage involves certain risks. When funds make investments in derivatives, borrow cash for investment purposes or use physical short sales, leverage may be introduced.

Leverage occurs when a fund’s exposure to underlying assets is greater than the amount invested. Consequently, any adverse change in the value or level of the underlying asset, rate or index may amplify losses compared to losses that would have been incurred if the underlying asset had been directly held by a fund. While there are clear benefits to using these types of tools and strategies under certain circumstances, it’s also important to consider the risks involved.

**Figure 3: Examples of Alternative Strategies**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long/Short Equity</td>
<td>Long-short portfolios hold sizeable stakes in both long and short positions in equities, exchange traded funds, and related derivatives. The strategy seeks to profit from stock gains in the long positions as well as stock price declines in the short positions.</td>
</tr>
<tr>
<td>Long/Short Credit</td>
<td>Long/Short Credit strategies seek to profit from changes in the credit conditions of individual bond issuers and credit markets segments represented by credit indexes. Typically, portfolios purchase bonds, or sell credit-default swaps, with the expectation of profiting from narrowing credit spreads; or, the funds sell bonds, or purchase credit-default swaps, with the expectation of profiting from the deteriorating credit of the underlying issuer.</td>
</tr>
<tr>
<td>Market Neutral</td>
<td>Market neutral strategies attempt to reduce systematic risk created by factors such as exposures to sectors, market-cap ranges, investment styles, currencies, and/or countries. They try to achieve this by matching short positions within each area against long positions. These strategies are often managed as beta-neutral, dollar-neutral or sector-neutral.</td>
</tr>
<tr>
<td>Managed Futures</td>
<td>Managed futures strategies primarily trade liquid global futures, options, swaps, and foreign exchange contracts, both listed and over-the-counter. A majority of these strategies follow trend-following, price-momentum strategies.</td>
</tr>
<tr>
<td>Volatility</td>
<td>Volatility strategies trade volatility as an asset class. Directional volatility strategies aim to profit from the trend in the implied volatility embedded in derivatives referencing other asset classes. Volatility arbitrage seeks to profit from the implied volatility discrepancies between related securities.</td>
</tr>
<tr>
<td>Macro</td>
<td>Macro strategies are predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysis, combinations of top-down and bottom-up theses, quantitative and fundamental approaches and long- and short-term holding periods.</td>
</tr>
<tr>
<td>Multi-alternative</td>
<td>Multi-alternative strategies offer investors exposure to several different alternative investment tactics. These funds have a majority of their assets exposed to alternative strategies.</td>
</tr>
</tbody>
</table>

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4 Strategy definitions based on Morningstar Category Classifications and HFR Strategy Classifications
One lens through which we can view the value of investments is the degree to which they move with/look like the rest of our portfolio—their correlations. Alternatives have two related advantages with respect to their co-movement with traditional asset classes:

1) First, alternatives as a group tend to move in a way that is more disconnected from traditional asset classes. The low—even negative—correlations show us that their movements are affected by different things and therefore less connected. The result of using alternatives is a more stable portfolio over time.

2) Alternatives also use correlation in a strategic way, by using leverage and short selling to invest in traditional assets, thereby amplifying the low correlation effects seen between the traditional asset classes.

Figure 4: Alternative strategies have low to negative correlations to equity and fixed income markets

<table>
<thead>
<tr>
<th>1</th>
<th>Alternative Strategies Composite*</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>FTSE TMX Canada Universe Bond</td>
<td>0.36</td>
</tr>
<tr>
<td>3</td>
<td>ICE BofAML Global Board Market</td>
<td>0.05 0.83 1</td>
</tr>
<tr>
<td>4</td>
<td>S&amp;P/TSX Composite</td>
<td>-0.13 -0.02 0.03 1</td>
</tr>
<tr>
<td>5</td>
<td>S&amp;P 500</td>
<td>0.44 0.16 0.03 0.52 1</td>
</tr>
<tr>
<td>6</td>
<td>MSCI World</td>
<td>0.36 0.19 0.09 0.64 0.94 1</td>
</tr>
</tbody>
</table>

Source: Morningstar Direct, and Hedge Fund Research, Inc.

*Alternative Strategy represented by HFRI Fund Weighted Composite Index, Return numbers are in CAD. Hedge Fund Research (HFRI) is the established global leader in the indexation, analysis, and research of the hedge fund industry. HFRI Indices are considered the industry standard benchmarks for hedge fund performance.

Liquid Alternatives

One efficient method for the typical retail investor to access alternative assets and strategies is through a mutual fund in which the manager can utilize alternative investment assets, strategies, and tools.

Canada’s investment market is opening up to liquid alternative funds for retail investors as regulatory changes have provided more access to liquid alternative investments to help diversify portfolios and increase the potential to achieve higher risk-adjusted returns. The market for liquid alternative investments is expected to accelerate in Canada, as it already has in the U.S. over the past few years.

Until recently, liquid alternatives in Canada were only offered under National Instrument 81-104 prospectus-based commodity pools or on a prospectus-exempt basis under offering memoranda. The Canadian Securities Administrators (CSA) is modernizing how it regulates liquid alternative investment funds as these products become more accepted by mainstream investors. Overall, the regulatory framework is becoming simpler and more investor-friendly.

Figure 5 provides a high-level summary of the key investment restrictions that apply to alternative mutual funds.

Figure 5: Highlights of National Instrument 81-102:

<table>
<thead>
<tr>
<th></th>
<th>Alternative Funds</th>
<th>Conventional Mutual Funds &amp; ETFs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Borrowing</strong></td>
<td>50% of NAV*</td>
<td>5% of NAV with restrictions</td>
</tr>
<tr>
<td><strong>Short Selling</strong></td>
<td>50% of NAV* (cash cover no longer required)</td>
<td>20% of NAV 150% cash cover</td>
</tr>
<tr>
<td><strong>Concentration in one user</strong></td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Leverage (gross aggregate exposure)</strong></td>
<td>3x</td>
<td>None</td>
</tr>
<tr>
<td><strong>Illiquid Assets</strong></td>
<td>10% of NAV</td>
<td>10% of NAV</td>
</tr>
</tbody>
</table>

*50% combined between borrowing and short selling

Liquid alternative mutual funds, under the recent regulatory changes, are subject to similar ongoing disclosure requirements as conventional mutual funds and other prospectus-qualified investment funds. These regulations impose high standards of transparency and independent oversight in terms of the investment strategy, holdings and reporting for alternative mutual funds, which is beneficial for retail investors.
How liquid alternatives work

They are mutual funds or ETFs

The advantages to retail investors of using a liquid alternative product, compared to traditional alternatives, include:

- an easier entry point in terms of the initial investment;
- lower management fees;
- transparency and reporting as demanded by regulation;
- regulatory limits on the amount of total leverage employed and caps on the allocation to illiquid assets; and
- the ability to move in and out of the investment with relative ease.

Improvements to analytical and support technology, as well as a rising level of comfort and expertise in alternative investments, have allowed portfolio managers to dynamically rebalance holdings across a range of alternative assets and strategies as they seek reduced risk and enhanced returns. The use of a mutual fund structure assures investors that the liquid alternative product is properly described within a prospectus and subject to both regulatory approval and ongoing review.

A focus on absolute return

Many liquid alternative funds focus on offering a positive “absolute return” that doesn’t depend on a general upward direction in stock and/or bond markets. For example, multi-alternative funds (as described in Figure 3) tend to target an absolute return that exceeds the return of cash over a period of time, independent of the general direction of markets. In contrast, most traditional mutual funds are “relative return” investments that seek to outperform an appropriate benchmark over time, but their direction of return — positive or negative — is driven by the overall direction of markets.

In many cases, absolute return funds aim to deliver a target return while delivering low volatility compared to a traditional balanced portfolio. The goal is also to maintain low correlations or low beta to global stock and fixed income markets. Having access to multiple alternative strategies gives managers the ability to stay on top of changing market conditions, including changes in correlations. Multi-strategy funds typically have the benefit of being able to dynamically adjust weightings depending on the market environment.

Narrow to broad focus

Liquid alternative funds come in many different varieties. As the Canadian liquid alternatives market expands, it will be important for investors, advisors, industry organizations and regulatory agencies to properly distinguish among the various approaches. The area of focus and type of strategy utilized will be the key determinants that drive the different behaviours and different outcomes among these funds.

By way of broad categorization, we can think of liquid alternative funds as taking the following forms:

Alternative Equity Funds — use alternative strategies primarily within the equity universe. These will most typically be long-short funds that focus on enhanced alpha generation (from long and short trades) and can be structured with total exposure to the underlying equity market (or beta) ranging from one (full underlying market exposure) to zero (market neutral). They can also include leveraged exposures to various broad equity markets, sectors, or styles, both long and short. The type of leverage used in these funds would include short selling and/or the use of futures.

Alternative Credit Funds — use alternative strategies primarily within the fixed income universe. These can take the form of long and/or short exposure to individual bonds and/or to various sectors of the bond market, i.e., government bonds, high yield bonds, or loans across many global markets. They will employ varying degrees of leverage to deliver their investment objectives and can be structured with varying amounts of interest rate or credit market beta. These strategies would employ leverage via short selling and/or the use of futures.

Global Macro Funds — these funds typically invest globally across a wide range of traditional and non-traditional asset classes to benefit from regional and global macroeconomic developments. Asset exposure typically includes commodities and broad equity, bond and currency market exposures across a wide range of developed and developing markets. They can take long and short positions in any liquid asset class, and can, therefore, benefit from rising and/or falling price trends and/or divergence or convergence in prices of two related instruments. Within these types of funds, the primary form of leverage would be the use of derivatives, such as market futures, in which only a small amount of capital is required to obtain a much larger amount of risk exposure.
**Multi-Strategy Funds** — these funds are typically a combination of two or more of the above-noted groupings.

**Market Neutral Funds** — these funds are a specific category of equity, credit, global macro or multi-strategy funds that are structured to have zero or close to zero broad market beta. That means their behaviour will be different from the broad direction of stock or bond markets, both during up and down markets. They strive to deliver a return that’s not dependent on broad market direction, but unlike absolute return strategies, market neutral funds will have strict limits on the extent to which they can capitalize on broad market trends to deliver those returns.

**Miscellaneous Alternative Funds** — this is a catch-all that contains all strategies that don’t fit into the above categorizations. They will include niche, single-asset-class strategies that employ leverage and/or shorting in specific areas of the market, such as specific commodities, currencies, and other asset classes not captured above. In addition, these funds may use non-traditional or alternative assets to deliver their objectives without using leverage or short-selling.

**Directional v. non-directional**

Directional vs. non-directional is the extent to which an investment tactic or strategy is connected to one of the broader asset class markets (e.g., large cap equities or government bonds). A directional strategy would seek outperformance from the increase (decrease) in markets, by timing or leveraging (shorting) the market return to generate above market returns. The value comes in the market movement, and the strategy would harness and/or amplify that for performance. Non-directional strategies look for value in places unconnected to general market movements, like pricing or other market anomalies. In the same manner, non-directional strategies use leverage and shorting to expose and/or amplify the desired exposure. One simple illustration of non-directional investing could be trying to exploit the expected difference in returns of two equity markets; we could do this by buying a $1,000 futures contract of the DAX exchange in Germany, and selling $1,000 futures contract for the S&P 500 in the US. With no net market exposure, our net gain would be the difference in returns between Germany and the US, irrespective of the direction of each global equity market.

**Are liquid alternative funds suitable for you?**

As liquid alternative funds become increasingly available to both advisors and investors, it’s important to recognize that liquid alternatives may not be appropriate for all investors.

Broadly speaking, liquid alternatives fit well with investors who are focused on specific outcomes over the medium to long term, such as improving risk-adjusted returns and achieving greater portfolio diversification.

Keep in mind that liquid alternatives are sophisticated and highly complex investment vehicles, so you need professionals with proven expertise to invest in them on your behalf. For instance, Mackenzie Investments has a team of portfolio managers and asset allocation specialists with significant experience in the world of liquid alternatives. This team has the responsibility to make alternative assets and strategies available to retail investors in a convenient and fully regulated mutual fund structure.

**Next steps**

If you’re interested in exploring the potential benefits of liquid alternatives, talk to your financial advisor to see if a liquid alternative mutual fund may be suitable for your investment time horizon, risk tolerance, financial objectives, and other important investment criteria. Your advisor can also help determine how much exposure to liquid alternative investments is appropriate for your specific circumstances.
Cash borrowing

A mutual fund can borrow cash, invest that cash, and benefit from any positive returns generated by those investments after the borrowed money plus interest has been repaid. This is similar to an individual investor using a margin account.

Correlation

A statistical measure of how two securities move in relation to each other.

Derivatives

Many derivative instruments are particularly effective for creating leverage in a portfolio because they require low, or in some cases, zero upfront capital to gain exposure to an underlying asset.

The notional amount of a derivative contract is the total value of the underlying security on which the derivative contract is based and can differ significantly from the market value of the derivative at any point in time. The notional amount can provide some indication of the degree of leverage the derivative contract is introducing to the portfolio. However, notional values are not particularly effective at indicating the potential risk or volatility of the derivatives position. The strike price of an option and the volatility of the underlying security are key determinants of a derivative’s risk which are not captured by looking simply at notional value.

In an alternative investment strategy, derivatives can be used for hedging purposes to reduce portfolio risk, or to implement a certain investment view. For example, put options can be purchased to hedge downside risk associated with a portfolio position, but could also be used to implement a view on the direction and volatility of the underlying security. Interest rate swaps can be used to hedge the duration of a portfolio’s holdings but could also be used to implement a view on the direction and volatility of interest rates.

GLOSSARY

Absolute return

Absolute return is the return of an asset (stock, bond, fund etc.) over a certain period. This measure looks at the growth (or decline of the asset) over the period. Absolute return is typically displayed as a percentage of the asset’s original value, at the beginning of the given period of time.

Example:

If you put $100,000 into a mutual fund and one year later the value has grown to $110,000, your absolute return is $10,000 or 10%.

Additionally, if you put $100,000 into a mutual fund and one year later the value has declined to $95,000, your absolute return is a loss of $5,000 or -5.0%.

Absolute return is often used in relation to relative return, which is the return an asset achieves over a period of time compared to a benchmark (a standard against which the performance of a fund, security or investment manager can be measured).
Forward contract
A forward contract is a custom (unstandardized), non-exchange-traded agreement between two parties: a buyer and a seller. It obligates the buyer to purchase an asset (and obligates the seller to sell an asset) at an agreed price at a specified future date.

For simplicity, let’s use sugar as an example. If you plan on producing one ton of sugar next year, you have two choices:

1) You could sell what you produced for whatever the prevailing price (spot price) is when you harvest in one year.

or

2) You could sell a forward contract to a buyer (e.g., a bakery) for a fixed price today. In one year, the bakery will pay you the agreed fixed price in return for the one ton of sugar you promised in the contract, regardless of what the spot price is at that time.

Futures contract
A futures contract is a standardized contract agreement (i.e., each contract is set with the same size, price, currency and grade of asset, if applicable) between a buyer and a seller. The parties are obligated to exchange a certain asset for a predetermined price on a specific day in the future (expiration date).

It is important to note the key differences between a forward contract and a futures contract:

<table>
<thead>
<tr>
<th></th>
<th>Futures Contracts</th>
<th>Forward Contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange Traded</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Regulated</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Standardized</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Counterparty Risk</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Upfront Costs</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Note: Unlike forward contracts, futures contracts are guaranteed by a clearinghouse and, therefore, mitigate the risk of default by either party in the intervening period.

Futures Margin Clearance Process

Note: Forward contracts bear a high risk because there is no clearinghouse involved that guarantees performance.
Options

Call option
A call option is an option contract in which the holder (buyer) has the right, but not the obligation to buy a specified quantity of a security at a specified price (strike price) within a fixed period of time (until its expiration).

The call buyer benefits when the stock price increases to a price well above their option’s strike price. If the stock price does increase above the call’s strike price, the call option’s price increases as the ability to buy shares at a much lower price becomes more valuable. Therefore, a trader who buys a call anticipates the stock price will increase.

A call seller benefits when the stock’s price trades below the option’s strike price. If the stock does trade below the strike price, the call will expire worthless. As a result, the call seller will keep the premium collected for selling the call.

Call options are typically used by investors for three primary purposes:
1. Tax management
2. Income generation
3. Speculation

Expiration P/L Graph: Buying a Call Option

Put option
A put option is an option contract giving the owner the right, but not the obligation to sell a specified amount of an underlying security at a specified price within a specified time. This is the opposite of a call option, which gives the holder the right to buy shares.

In other words, it is a bearish strategy that benefits from a drop in the stock price or an increase in implied volatility. Buying a put option is similar to shorting shares of stock, except buying puts has limited loss potential and a lower probability of profit since the break-even price will be lower than the current stock price. If the option expires out of the money, then your loss will only equal the premium you paid for the option.

Expiration P/L Graph: Buying a Put Option

Note: Holder = Buyer = Long put

Note: Holder = Buyer = Long call
Short selling

Physical short selling involves selling shares of a borrowed security in the open market with the expectation that the share price will decline. If the price drops, the portfolio manager buys the same number of shares at the lower price and returns them to the broker who loaned them. The portfolio manager has an obligation to return the same number of securities. The manager’s profit is the difference between the proceeds from selling the stock at the higher price and the cost of buying it at the lower price, less any commissions.

In short selling, the portfolio manager wants to “sell low” in the future.

Generally, the portfolio manager must hold margin in an account with the broker who lends the securities, and there are costs associated with shorting. The borrower of the securities must make the lender whole for any dividends, distributions or interest payments paid on those assets during the period of the lending arrangement.

There are also derivative instruments that can be used to create a position that benefits when the price of the underlying security declines. Some examples include selling futures contracts, buying put options, or using various kinds of swaps.

Using short positions enables managers to vary the extent that returns on the asset class influence the absolute return of the portfolio and, more precisely, target the portfolio’s “beta” exposure.
Swaps

Credit default swap
A credit default swap (CDS) is an over-the-counter derivative contract between two parties in which the buyer makes a series of cash payments to the seller and receives a promise of compensation for credit losses resulting from the default. Neither party needs to hold the underlying debt when entering into a swap.

- **Credit Default Swap Seller**
  - Promises to pay swap buyer a set amount if WidgetCorp defaults, often $10 million
  - Receives annual payments from swap buyer in return for “insurance”
  - Can include banks, insurance companies, hedge funds or others

- **Credit Default Swap Buyer**
  - Promises quarterly payments to swap seller
  - Receives promise of large payout if bond defaults
  - Can include banks, insurance companies, hedge funds or others
  - If WidgetCorp’s financial fortunes turn sour, the swap becomes more valuable. A swap holder can resell it and get high payments in return

WidgetCorp
Borrows money from banks or issues bonds to finance operations

Interest rate swap
An interest rate swap is an agreement between two counterparties in which one stream of future interest payments is exchanged for another based on a specified principal amount, over a set period of time. Swaps are derivative contracts and trade over-the-counter.

While there are other types of interest rate swaps, the most commonly traded and most liquid interest rate swaps are known as “plain vanilla” swaps, which exchange fixed-rate payments for floating-rate payments based on the London Inter-Bank Offered Rate (LIBOR), which is the interest rate that high-credit quality banks charge one another for short-term financing.

In other words, the receiver demands a fixed interest rate in exchange for the uncertainty of having to pay the short-term LIBOR (floating) rate over time.
Total return swap

A total return swap is a contract between two parties, in which party 1 (the payer and the owner of an asset) will pay party 2 (the receiver) the **total return on an asset**. In exchange for the payments from the asset, party 2 will pay an interest rate to party 1.

This interest rate will typically be set based on a standardized rate (such as the rate banks set to borrow from each other) plus an additional spread (e.g., interbank rate of 1% + a spread of 2% = 3% interest rate).

The payer is speculating that the asset will decline in value and, therefore, benefit from the fixed interest-rate payments.

The receiver is speculating that the asset will increase in value and the total gain will be greater than the interest rate that the receiver is paying.

The reference asset (typically a bond or stock) will have a **market value** and a **coupon payment**, in which both factors make up the total return of the asset.
Commissions, trailing commissions, management fees and expenses all may be associated with mutual fund investments. Please read the prospectus before investing. Mutual funds are not guaranteed, their values change frequently and past performance may not be repeated.

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