EPH
EXPAT PENSION HOLLAND

FINANCIAL DERIVATIVES

Introduction

In the previous Investment Funds Brochures we have explained that the essence of investing is to make sure that your Personal Risk Profile is translated in a correct manner into suitable Investment Categories.

The Personal Risk Profiles vary from 'Very Defensive' to 'Very Offensive'. The Investment Categories vary from 'Savings' with the lowest risk to 'Financial Derivatives' with the highest risk.

We like to make sure that our clients receive correct information about the risks related to all usual Investment Categories.

As Financial Derivatives are sometimes used in Investment Funds within and outside of Pension Plans, we will now mention the most relevant general aspects thereof. Which is not to be treated as advice.

In order to stress the possibly huge impact and ultra high risk Financial Derivatives can have in certain variations, we best quote Warren Buffet. He stated in 2003 that certain **'Financial Derivatives are financial weapons of mass destruction.**'

Financial Derivatives Versus Equity/Bonds

Equity/Bonds: Underlying Value

If you buy a Stock or Bond you are the sole owner of that financial commodity. You own the commodity and thus are entitled to changes in its value and possibly existing periodical pay-outs like dividends.

Financial Derivatives: No Underlying Value

If you buy a Financial Derivative you do not buy a financial commodity or underlying value but i.e. just the entitlement to the changes in its value. Thus you only own the value fluctuation.

As Financial Derivatives Contracts have in general a certain limited amount of time during which they are valid, this explains why Financial Derivatives in general are much more high risk and volatile than the ownership of for example Equity.

As Financial Derivatives are also rather technical this all explains why they have the 'Ultra High Risk' profile and should only be used in case one has the suitable 'Very Offensive' risk profile and also completely understands all related risks. And chances.

Three Kind Of Financial Derivatives

We can distinguish three kind of Financial Derivatives:

Futures/Forwards

Futures and Forwards are contracts that are used by businesses and investors to hedge against risks or to speculate. They are examples of derivative assets that derive their values from underlying assets. Both contracts rely on locking in a specific price for a certain asset.

The underlying assets generally fall into one of three categories:

- **Financial** (Stocks, bonds, market indices, interest rates, currencies, etc.)
- **Commodities** (Natural gas, gold, copper, silver, oil, electricity, coffee beans, sugar, etc.)
- **Other** (Natural catastrophes, rainfall, temperature, snow, etc)

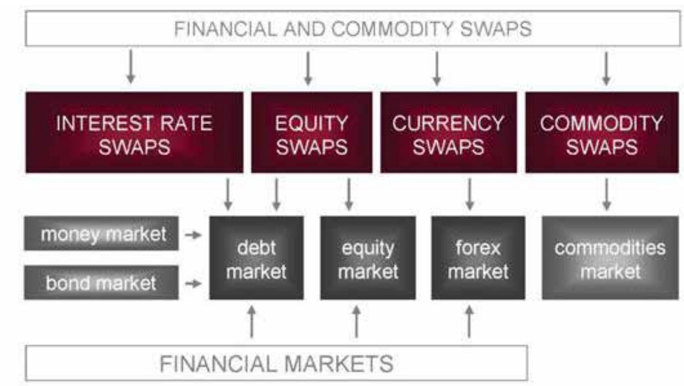
Futures are the same as Forwards except for two main differences:

- Futures are settled daily (not just at maturity) so futures can be bought or sold at any time;
- Futures are typically traded on a standardized exchange.

Swaps

A Swap is a Derivative Contract through which two parties exchange the cash flows or liabilities from two different financial instruments.

Most Swaps involve cash flows based on a loan or bond, although the instrument can be almost anything. Usually, the principal does not change hands. Each cash flow comprises one leg of the Swap. One cash flow is generally fixed, while the other is variable and based on a benchmark interest rate, floating currency exchange rate or index price.



The most common type of Swap is an Interest Rate Swap. Swaps do not trade on exchanges and retail investors do not generally engage in Swaps. Rather, Swaps are 'Over-The-Counter' (OTC) contracts primarily between businesses or financial institutions that are customized to the needs of both parties.

Options

An Option is a Derivative Contract that gives its owner the right to buy or sell Securities at an agreed-upon price within a certain time period.

The definition of these words:

- **Option:** You pay for the *Option*, or right, to make the transaction you prefer. You are under no obligation to do so.
- **Derivative:** The Option *derives* its value from that of the underlying asset. This underlying value is one of the determinants of the Option's price.
- **Agreed-upon price:** This is known as the *strike price*. It doesn't change over time, no matter what happens to the stock price. It has that name because you will strike when the underlying value makes you money.
- **Certain time period:** That's the time until the agreed-upon date, known as the *expiration date*. That's when your Option expires. You can exercise your Option at the strike price at any time until the expiration date. In Europe, you can only exercise it exactly *on* the expiration date.

As our aim is to provide more insight in the nature and especially the risks of Financial Derivatives and as Options are most common, we will as of now only focus on the essence of Options.

Two Kind Of Option Contracts

There are two types of Options. One gives you the right to *buy* the asset. The other the right to *sell* it.

Call Options

The right to buy is called a Call Option or a Call.

A Call Option is "in the money" when the strike price is below the underlying stock value. If you bought the Option and sold the stock today, you'd make money.

You buy Call Options when you believe that the security will rise in value before the exercise date. If that happens, you'll exercise the Option. You'll buy the security at the strike price and then immediately sell it at the higher market price.

If you feel bullish, you might also wait to see if the price goes even higher. Buyers of Call Options are called '*holders*'.

Your profit equals the security proceeds, minus the strike price, the premium for the Call Option and any transactional fees. That's called being 'in the money'. The profit is called the option's 'intrinsic value'.

If the price doesn't rise above the strike price, you won't exercise the Option. Your only loss is the premium. That's true even if the stock's value plummets to zero.

Why wouldn't you just buy the security instead? Buying a Call Option gives you much more leverage.
If the price rises, you can make a lot more money than if you had bought the security instead. Even better, you only lose a fixed amount if the price drops. As a result, you can gain a high return for a low investment.

The other advantage is that you can sell the Option itself if the price rises. You've made money without ever having to pay for the security.

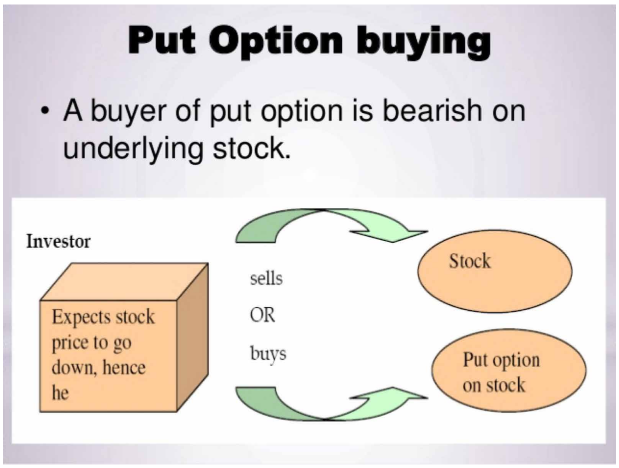
You would sell a Call Option if you believe the asset price will drop. If it drops below the strike price, you keep the premium. A seller of a Call Option is called the '*writer*'.

Put Options

With a 'Put' Option, or simply a Put, you purchase the right to sell your stock at the strike price anytime until the expiration day.

In other words, you have purchased the option to sell it. A Put Option is "in the money" when the strike price is above the underlying stock value.

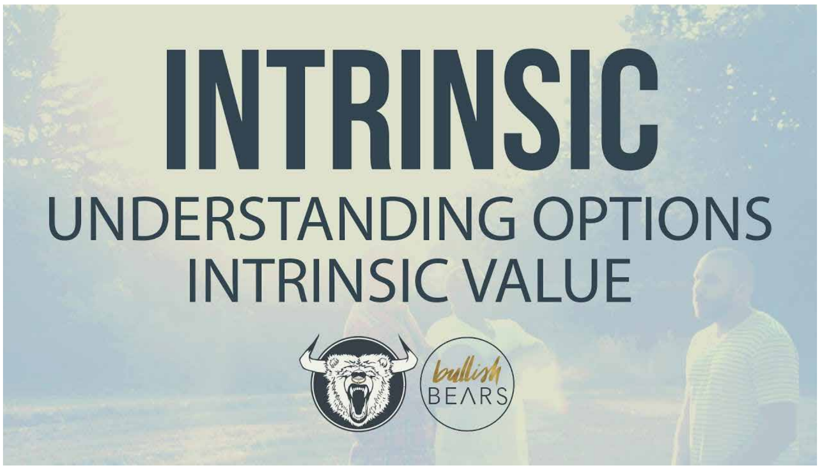
So, if you bought the Option to sell and bought the stock today, you'd make money because your purchase price was lower than your sale price.



The Value Of Options

We can distinguish six different elements that determine the price of Options:

1] The value of the underlying asset. As it increases, the right to buy it will become more valuable. The right to sell it becomes less valuable.
2] The Implied Volatility. If traders think the price of the underlying asset will swing wildly, then Options become more valuable. The increased volatility increases risk. As a result, traders demand higher returns for the Options.
3] The Dividends. If the underlying asset pays dividends, it will drive the Options price up slightly. Dividends increase the values of the underlying asset.



4] The Strike Price. The lower the strike price, the more valuable the Option.
5] The Time Period. The longer the time period, the more valuable the Option.
6] The Interest rates. If interest rates are high, it will drive the Options price up a bit. High interest rates depress Bond prices. Bonds compete with Options for investors' dollars. High interest rates make Options more attractive than Bonds. As a result, they can charge higher prices.

Options In Practice

The biggest advantage of Options is that you don't own the underlying asset. You can benefit from the value of the asset, but you don't have to transport or store it. That's not a huge issue for Stocks, Bonds, or Currency but it could be a challenge for Commodities.

It also allows you to use leverage. You only have to pay for the cost of the Option, not the entire asset. If you buy a Call Option and the price rises, you've made all that profit without much investment. That is what it is all about.

Your risk is substantially smaller if you buy a Call Option. You cannot lose more than the premium, even if the asset's price falls to zero.

Furthermore Options can protect your investments against a decline in market prices. Long-Term Equity Anticipation Securities allow you to protect against drops in stock prices for two years. Call Options can also allow you to buy a Stock at a lower price.

You can also earn an income on the assets you do own. If you sell a Call Option, you earn income from the premiums. Your biggest risk is if the stock price rises and the buyer exercises the Option. You would then lose the potential upside profit.

Finally a substantial risk can be that when trading Options that you are competing against Hedge Funds and other very sophisticated professional traders. They spend all day, every day, analyzing option strategies. They've hired highly educated quantitative specialists who use calculus to determine the accurate price of an Option. They also have sophisticated computer models that map out all potential scenarios.

To Trade Options On

You can trade Options on Stocks, Bonds, Currencies and Commodities.

Businesses often use Options to protect against volatility. Investors often use Options to protect against future loss. Traders and speculators try to use Options in order to make huge profits with little investment.

Options on stocks are the most well-known. You can buy Options on an exchange-traded fund or an index. Which has as benefit that it helps you benefit from changes in the market overall without having to research a specific company.

Currency Options allow businesses to hedge against changes in exchange rates. For example, a European company could buy a Currency Option if it had a large payment due in U.S. dollars. If the dollar's value rose, it could exercise the Option and only pay the strike price. If the dollar declines, it can let the Option expire.

Firms that trade **Commodities** use **Options** to protect against price changes. Commodities Options are available for cocoa, coffee, sugar, orange juice, and cotton. Weather affects these crops, so businesses often prefer to fix the price and reduce their risks.

Bond Options may protect against rising interest rates. Bonds' values fall when interest rates increase.

Conclusion

Financial Derivatives and Options can be a usefull additional Investment Category for the person with the related risk profile if the person in charge is highly capable.

Even though Financial Derivatives can be used in a defensive manner, there is also the other side with ultra high risk exposure.

Therefore we advise our clients not to trade Financial Derivatives themselves and if so desired seek professional advice.

International experience and Network

We have more than 20 years of experience in international expat and collective pension consultancy. Thus we have an elaborate international network. If so desired, we can advise and act swiftly in international matters.

Contact

For further information please contact pension jurist/consultant Patrick Donders:

Tel: +31 (0)6 26014112
E-mail: info@expatpensionholland.nl
Site: www.expatpensionholland.nl

AFM license number 12043181

EPH EXPAT PENSION HOLLAND