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# **TRADING BINARY OPTIONS**

Strategies and Tactics

**Second Edition**

**Abe Cofnas**

**WILEY**

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# Preface

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Are you interested in trading, but don't like to wait weeks and months for a return? Are you following news events and want to financially benefit from your knowledge? Are you new to trading and want to participate but avoid the long learning curve for mastering trading skills? If these questions are on your mind, this book is for you.

Binary option trading provides excitement and opportunity for achieving unusually large returns in less than a week! While there are many variations to this type of trading, this book focuses on the regulatory-approved weekly binary option trades of the North American Derivative Exchange (Nadex). Trades have limited risk to the cost of a position. There is no margin. The trade is a bet on the direction of a market by the end of the week. If the trade is correct, the payoff is \$100 per lot. If it is wrong, the payoff is \$0. Simply put, it's a yes-or-no proposition. One can open an account with as little as \$100 and start trading. This simple structure allows anyone to trade in over 20 different underlying markets, from currencies to indexes to commodities.

This book takes the reader through the basic features of the binary option instrument. But it does more. It provides a detailed review of fundamental and technical analysis useful to making trading decisions. Beginners, as well as more experienced traders, will be able to build upon their core trading knowledge. More importantly, new online tools and techniques for detecting market sentiment are presented, because trading can no longer be separated from the Internet and the social media it has generated. The web itself is a force on trading decisions and outcomes, as emotions are propagated through the web. This phenomenon has made sentiment analysis a major challenge for traders. For the binary option trader who is shaping a decision for a weekly outcome, or even an intraday outcome, the critical factor will be the actionable knowledge that is applied.

This book provides real-world examples of how to scan the political and economic news and formulate appropriate binary option trading strategies. Key trading strategies are reviewed with examples. These

include: *at-the-money*; *out-of-the-money*; *in-the-money*; *deep-in-the-money*; and *deep-out-of-the-money*. Also reviewed are case studies of binary option trading in relationship to key news events that we have lived through. These include: The U.S. congressional elections; the Greek sovereign risk crises; turmoil in the Middle East; and the Japanese earthquake. The reader will see exactly how these events shaped trading strategies that worked.

This book is also designed to provide a self-directed performance audit capability to the trader. Specific training challenges are provided, including a test of your knowledge (see Appendix A).

No other book provides a comprehensive get-started approach to trading binary options. It is my hope that *Trading Binary Options: Strategies and Tactics* makes a difference and improves your ability to get started in binary option trading, but most importantly, to do it the right way!

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A.C.



# About the Author

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**Abe Cofnas** is considered a leader in the field of currency trading, analysis, and training. He founded learn4x.com ([www.learn4x.com](http://www.learn4x.com)) in 2001 as one of the first online training programs for currency trading. He has been the Forex trader columnist for *Modern Trader* magazine since 2001, writing over 100 columns on Forex events.

He has authored three previous books on trading: *The Forex Trading Course: A Self-Study Guide to Becoming a Successful Currency Trader* (now in its second edition); *The Forex Options Course: A Self-Study Guide to Trading Currency Options*; and *Sentiment Indicators—Renko, Price Break, Kagi, Point and Figure: What They Are and How to Use Them to Trade*. He is also the editor of Binary Dimensions newsletter, which specializes in binary option alerts.

He brings extensive understanding of trading from all perspectives, including advanced fundamental and political analysis. Cofnas holds two master's degrees from the University of California at Berkeley—a master's in political science and a master's in public policy analysis. He is Senior Fundamental Strategist for the Market Trader's Institute.

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## INTRODUCTION

# What Are Binary Options and Why Are They Important?

Let's get right to the point and answer the question: What are binary options? *Binary options* are a type of option instrument that provide a fixed deadline for expiration, with a fixed payout. Basically, it is a yes or no bet. Specifically, the bet is on whether a settled price of an underlying market will be at, above, or below a target strike barrier, by a defined future time. For example, on a Monday morning, the trader is trying to answer the question: Will the S&P be at 1350 by Friday at 4 P.M.? If the trader anticipated this outcome, and turned out to be right, the payoff using the North American Derivatives Exchange (Nadex) binary options would be \$100 per unit. If another index—the S&P 500, for example—did not reach this level, the payoff would be zero dollars. If the trader is correct, the return can approach extraordinary levels of 500 percent and more for only five days of play. This book will show you how it is possible for the average person to achieve extraordinary profits with binary option trading.

The binary option is called *binary* because it fits the condition of being either right or wrong—all or nothing. Binary option trading fits right into the digital era, which is based on binary logic. In fact, the binary options offered by Nadex can be considered to be part of a type of option classified as European Digital Options. But the question arises: Why are binary options important? There are many reasons that come to mind. Binary options are important, but not simply because they are a relatively new trading

instrument. In fact, they are not really new. They have been used for decades at institutional levels as an *over-the-counter* instrument but, most significantly, traders in the United States have used them since 2008 when they became approved by the Commodity Futures Trading Commission (CFTC) and regulated through the Nadex. They are often called *rebate options* because of their use to generate a payment as a form of insurance when damage occurs. But let's get back to the question. Binary options are important because they offer to the trader, in one instrument, the ability to succeed at many levels that go beyond simply obtaining a winning trade.

Binary options are an ideal trading instrument for new traders to test their skills because at a core level, binary option trading starts with anticipating direction. Being right on direction is one of the most important skills relevant to trading any market. In fact, being wrong on direction accounts for a majority of the losses occurred in any trading. Another key skill important for mastering binary option trading is risk management. A binary option trade is not necessarily a set-and-let decision. This kind of strategy is followed when a position is put on and thereafter the trader watches the screen and sees what happens at the end of the week. Set-and-let trading does not involve managing the trade during its duration. Sometimes this is an effective strategy. However, trading binary options requires a sharp sense of timing. It's important for the trader to know when conditions are ripe for entry as well as when market conditions have changed enough to justify getting out of the way. Honing entry and exit skills in binary option trading can be transferred to other markets.

Binary options are also important because they offer a level playing field. Anyone can trade the binaries and at very low costs ranging from \$5 to \$90 per lot at any moment. Because the time frame is at most one week, binary option trading counters the observed tendency of traders to hold losers too long and sell winners too soon (Odean 1998).

But there are even more reasons that contribute to the value of binary option trading. Binary options offer beginning traders the ability to explore over 20 different markets. In a sense, binary option trading presents a discount tour of global markets. Perhaps one of the most important reasons of all is that binary options are regulated (through the Nadex) and offer price transparency. In this post-Madoff era of scrutiny and skepticism, trading binary options that are regulated becomes more and more salient to traders. That is why this book focuses on the regulated binary options offered at the Nadex exchange. For those who want to trade the binary option instruments that are over the counter, the skills built in trading the Nadex instruments will apply.

Binary options are an exciting product. In fact, traders in the United States have responded by participating at increased volume levels of around 30 to 50 percent per month! At this pace of volume growth, binary trading can one day become as big as forex trading, which is now approaching \$5 trillion per day. In an email exchange with John Austin, the CEO of IG Markets Group North America, and a key player in creating the binary option product, he says: "There is really no competing product. I feel quite strongly that for smaller retail traders, the capped-risk nature of binaries is hugely important. Nadex's contracts allow traders to speculate on global financial markets while using only a limited amount of risk capital and without leaving themselves open to catastrophic losses in the event of unexpected market volatility. For this reason, I believe they may become the product of choice for those who are just starting out in trading. In addition, I think their small size and self-contained nature will mean they will become the default choice for more experienced traders looking for a cheap real-money way to test out new technical analysis-based trading systems, as well as being an additional toolkit used by conventional futures and FX traders alongside their more conventional trading."

Let's delve a bit into the psycho-dynamic aspects of binary option trading, because, as you will see later in this book, trading binary options is not only a fundamental and technical analysis endeavor, but it is also concomitantly a psychological behavioral experience. This points to another reason that binary options are exciting: their similarity to gambling. A binary option trade has been often viewed or referred to as a bet. This is metaphorically true, but not in fact correct. Betting in gambling is quite different from a binary option bet. In gambling, the bettors face the same fixed odds and cannot affect the probability of winning. A bet in a gambling activity is indeed a passive ride. Whether it's the roll of the dice, or the drawing of a card in a game of poker, the gambler is riding a *probability wave*. Finally, a gambling bet is associated with a probability about what proportion of time an outcome should occur. A binary option bet is quite different. It cannot be associated with a statistically predictable outcome.

The binary option trade is certainly a ride, but on a *sentiment wave*. It is also not a passive experience, and it is one that demands attention because the odds of winning are not a function of statistics. Instead, and in direct contradiction to the gambling situation, the odds of winning are determined by the skills of the trader in assessing market conditions and managing risk. In a roll of the dice, the next outcome is independent of the previous roll. In contrast, in binary trades, the next trade outcome is linked to the market behavior during the previous outcome! In gambling, the prevailing law is

the law of large numbers in which, eventually, winning and losing streaks offset each other. In binary option trading, winning and losing streaks are not statistical outcomes.

Binary option trading is a prime example of the value of actionable knowledge. The binary option trader is participating in an imperfect-information game, where it's never possible to have all the information necessary to win. It clearly takes a certain level of knowledge to play this game well. We will explore what kind of fundamental and technical skills are necessary to develop oneself into a binary option trader in greater detail in later chapters.

## Nadex versus CBOT Binaries

In any case, *Nadex binary options* are important because they are the fastest growing segment of exchange-listed binary options. But it is important to point out that the Chicago Board of Trade (CBOT) does offer binary options on *event risks*. These include the CME Hurricane Index, the Snowfall Index, and the Target Fed Funds. However, the *CBOT binary options* remain very small in volume, are highly illiquid, and are really tailored for institutions like insurance companies (see [www.cboe.com/products/indexopts/bsz\\_spec.aspx](http://www.cboe.com/products/indexopts/bsz_spec.aspx) for a list of CBOE binary options).

There are several differences between the CBOE and the Nadex binaries that should be clarified. First, the CBOE binary options use the cash index as the underlying market for the contract. In contrast, the Nadex binaries (except for currencies as the underlying market) use the futures index. More important, the CBOE binaries have a much wider *bid-offer spread*. Remember that buyers pay the ask price, and sellers pay the bid price. This creates a spread, which generates money to the firm. It is also important to note that the CBOE binaries have a much lower liquidity than Nadex binaries. It also appears that the CBOE volume is constantly very low, in the range of a few hundred contracts per month. In contrast, the Nadex sees volumes in excess of 100,000 lots per month. During the important May 2 week when huge sell-offs occurred in the markets, CBOE's S&P binary option volume was close to zero, while Nadex had a volume of 38,682 lots on all U.S. indexes.

The differences in the duration of the binary options are also important to note. CBOE binary options have expirations of a variety of months: one-month, two-month, and three-month expiration. The Nadex expirations are much shorter in duration. They are intraday, daily, and weekly. This means that by Friday at 4:15 P.M., all binary option contracts expire, giving the trader a fresh, new start every week. These differences point to Nadex as

having a significant advantage for traders who want to experience market action. High volume fuels the power of options and is a critical condition for traders—the Nadex fulfills that need. Lastly, Nadex binaries offer a logical place to start. The skills acquired for trading in Nadex can help prepare you for trading options in other markets.

In the near future, however, the popularity of Nadex options will surely spur other imitators. There are many binary option over-the-counter firms worldwide that provide different forms of binary options. These include, but are not limited to *one-touch* and *no-touch options*, as well as *range options*. One-touch options are trades in which a win occurs if the price touches a certain point. In these options, the trader is betting that either a resistance point or a support point will be touched by the price by a certain time. A no-touch option is a bet that the particular price point will not be touched by a certain time. A range option presents the bet that the price will stay in between two strike prices, or go through one of them by a certain time. Some of these innovative binary trades are very short, with expiration time frames of minutes. Also, in some overseas firms, the trader determines the size of the payout! In principle, the skills developed trading the Nadex options can enable effective trading of binary options, and other, perhaps more complex and sophisticated, options. So let's explore the key features of Nadex binary options in greater detail.

## Reference

Odean, T. 1998. "Are Investors Reluctant to Realize Their Losses?" *Journal of Finance* 53: 1775–1798.



## CHAPTER 1

# Key Features of Binary Option Types

This chapter covers the key features of a binary option contract available globally and in the United States. There are two basic types of binary option trades. The first is the laddered binary options offered at the Nadex Exchange, part of the IG Markets, the Cantor Exchange, the CBOE, the CBOT, and the NYSE binaries, also known as Byrds. The NYSE binaries launched in 2016 and offer binaries on equities. The NYSE entry into binaries allows traders to trade weekly binaries on major equities. The CBOE offers binaries on the VIX and announced binaries on the China A50 index. These are potential game changers for traders who look to use binaries as part of their total trading toolbox.

Nadex and the Cantor Exchange are CFTC approved. Nadex is owned by IG Markets. The Cantor Exchange, owned by Cantor Fitzgerald, is a true exchange and does not make a market in the binaries. In other words, they don't take the other side of a trade placed by a customer. Instead, liquidity is supplied by independent market makers. The second type of binary option trades is the non-laddered platform, simply offering the opportunity to bet on the whether the price will be higher or lower at expiration. These are not currently allowed in the United States, but are popular around the world.

Later in the chapter, I also discuss the four basic strategies of trading—at-the-money, in-the-money, out-of-the-money, and deep-in/out-the-money—as well as the role of the market maker in the process. The chapter will end with a sample bid/ask scenario.

## Defining the Key Features

Let's start by defining the features that shape most of the ladder binary option selection and trading. These terms will be used time and again throughout this book, so commit these definitions to memory. You'll come to know them well.

*Expiration date:* The time that the option expires.

*Settlement value:* The value of the option on expiration. It will be \$0 or a \$100-fixed payout.

*Underlying market price:* This is the actual real-time market price of the underlying contract.

*Contract:* This is the basic unit of a trade of one lot. The value of a lot varies among firms. For example, one lot at Cantor is \$1. One lot at Nadex is \$100. At IG, 0.01 lots is \$100.

*Bid:* The premium price that a trader receives for opening to sell a contract.

*Buy:* This refers to betting the underlying market will go up. A trader opens a trade and pays the ask price associated with a strike price. If the price settles above the strike price, then the trader wins the \$100 ask price.

*Sell:* This refers to betting the underlying market will go down. A trader puts on an open sell order. The trader pays for an open sell order (\$100 – bid). It is \$100 – (bid). This is equal to putting on a position, anticipating a decrease in the price of the underlying market. It is also the premium price that a trade pays for closing a position that was bought. The sell is also labeled as the put tab at the Cantor Exchange

*Spread:* The difference between the bid and the ask. With any new market, the spread will tend to be narrow as more volume increases.

*Bid size/offer size:* This is the number of positions being bought or sold. You will find that the bid and offer size is not useful as an indicator of sentiment.

*Commission fee:* The trader may pay a commission fee per transaction. Nadex charges \$1 per transaction. Firms offering Nadex binaries may be offering different commissions.

*Start time:* At the Nadex, IG markets, and Cantor Exchanges, the start time for a binary trader is fixed at the beginning of an interval. A five-minute trade interval starts, for example, at 05:00 and ends at 05:05. A trader can enter the trade before the expiration, but the time to expiration is not triggered by the entry. In other platforms (discussed later), a rolling start is featured. This means whenever the trader puts on a trade, the trade duration clock starts at that point and ends at the designated duration.

*Settlement value:* This is the price the binary firm uses to determine whether the trade is a winner or loser. Notice that there is no agreement between different firms on what is the settlement value. There are different formulas among different firms for determining settlement value. Of particular importance is that settlement value of binary option underlying markets among offshore firms (not regulated in United States, London, or Australia) are often manipulated to reduce winners.

*Expiration duration:* Binary expirations refer to the duration of the option. Among global platforms, durations run the board from one-minute to one-week expirations.

*Note:* The principles of trading binaries apply to all time frames. The short time frames involve more timing skills, and require a focus on momentum indicators and pattern breaks. Longer time frames, such as one day and more, allow fundamentals to influence the price patterns.

Notice that missing here are the option features known as the Greeks—Delta, Theta, Vega, Volga, and so on. They are not really missing. It's just that they are not necessary to trading weekly or intraday binary options that offer fixed payouts.

## Strike Price versus Underlying Market Price

Binary options featuring a ladder approach have several features that need to be thoroughly understood. Some of these features will be familiar to option traders and are common to all options.

The first feature to understand is the *strike price*. This is the price target a trader anticipates the price will hit at expiration time: at the target, above the target, or below the target. It is important to note that there can be up to 14 strike prices listed by the Nadex Exchange for each underlying contract. When you have a set of strike prices to trade, they are called a *ladder*.

For example, at Nadex and IG, the weekly binary option ladders are statements in which the trader decides to buy the binary option if he agrees it will be greater than the associated strike price. If the trader believes the settlement will be lower than the associated strike price, the trade that is put on is a sell. See Table 1.1 for examples of binary option ladders. Notice that the strike price closest to the indicative price (which is the market price of the underlying contract) has an ask value near 50. It is always the case that the market price closest to the ask price will be valued near 50.

**TABLE 1.1** Snapshot of Binary Contract and Strike Prices

Contract Strike Price	Expiration	Bid	Offer	Indicative
Gold (Feb16) > 1094.5	18-Dec-15	9.50	17.50	1066.7
Gold (Feb16) > 1084.5	18-Dec-15	19.50	27.75	1066.7
Gold (Feb16) > 1074.5	18-Dec-15	33.25	41.50	1066.7
Gold (Feb16) > 1064.5	18-Dec-15	48.75	57.00	1066.7
Gold (Feb16) > 1054.5	18-Dec-15	64.00	72.25	1066.7
Gold (Feb16) > 1044.5	18-Dec-15	77.00	85.00	1066.7
Gold (Feb16) > 1034.5	18-Dec-15	86.00	94.25	1066.7

Another component to understand is the *underlying market*. The binary option specifically tracks a particular market known as the underlying market. The underlying market for index-related binary strike prices are, except for the currency pairs, the near-term futures contracts. For example, a trader wanting to put on a position on gold would be watching not only the gold spot market, but the gold futures contract that is trading on the Commodity Exchange, Inc. (Comex). Similarly, if a trader wants to trade the S&P 500 binary at Nadex, the actual underlying market is the active future contract. The fact that the underlying markets may be a futures contract on the markets does not pose difficulties. The fact is that the spot and near-term futures contract for these markets move in close tandem to each other. But the exact settlement price is in the futures contract and not the underlying spot market, except for the currencies.

The updated list of what markets can be traded at these exchanges can be easily tracked at their respective websites (Table 1.2).

**TABLE 1.2** Binary Platforms

Firm	Website
North American Derivative Exchange (Nadex)	<a href="http://www.nadex.com">www.nadex.com</a>
IG	<a href="http://www.igmarkets.com">www.igmarkets.com</a>
NYSE ByRDs	<a href="https://www.nyse.com/products/options-byrds">https://www.nyse.com/products/options-byrds</a>
CBOE	<a href="https://www.cboe.com/micro/binaries/introduction.aspx">https://www.cboe.com/micro/binaries/introduction.aspx</a>
Cantor Exchange	<a href="http://www.cantorexchange.com">www.cantorexchange.com</a>