

## FOREX EDUCATION

### What is Trading?

Forex (or FX) means foreign exchange. What exactly does this involve? Exchanging one currency for another – it's as simple as that.

### Forex in Everyday Life

You don't necessarily need to be a trader to participate in the foreign exchange market. Every time you travel and need to exchange some money into a foreign currency, you are participating in it.

Imagine that you have just arrived in New York from Paris. You want to buy a hamburger at the airport, but you only have euros on you. So you'll need some US dollars if you don't want to see New York on an empty stomach.

So you go to the first foreign exchange desk at the airport, and exchange your euros into US dollars. Whether you believe it or not, this is the very first step of what we call forex trading.

Wait a minute! You exchanged 10 euros and got back 12.74 US dollars. How's that possible? This is the actual exchange rate that made you richer.

After a few days you wave goodbye to the Statue of Liberty and take a flight to Berlin. You exchange your leftover US dollars into euros. Hey, what happened? You got back less than you expected... Why? While you were in New York City, the exchange rate changed. Why? That's because of inflation, economic changes, and the balance between supply and demand, to only name a few of the factors that can influence the value of a currency.



## Be Alert to Changes

Everything changes all the time. So do currency rates.

In a nutshell, keep an eye on when exactly you exchange one currency for another, what currency pair you choose (e.g. US dollars vs. euros) and how much you exchange. Last but not least, how much you profit from the exchange.

The when, how much, what and profit are the basic points of forex trading.

### Money Matters

In forex, you buy and sell currencies (for example US dollar, Japanese yen, euro), and you may even earn a profit, according to which currency pair you exchanged. This is why we call it foreign exchange. Depending on the currency rates and market movements, you can make profits. It all depends on how alert you are and how economies change.

Don't confuse forex trading with physical trading – it's all online! You buy a currency online, sell another online, and you make a profit online. If you have a forex trading account, all your profit will be available there. You can withdraw your profit to your personal bank account any time – and finally cash it, if you want.

Because it's all about money, let's start with the basics. To make things simpler, in forex we use symbols. The most commonly traded currencies are listed in the table below.

CURRENCY	COUNTRY	SYMBOL	NICKNAME
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CURRENCY	COUNTRY	SYMBOL	NICKNAME
US dollar	United States of America	USD	buck
Euro	In 17 eurozone countries	EUR	fibre
Pound sterling	Great Britain	GBP	cable
Japanese yen	Japan	JPY	yen
Swiss franc	Switzerland	CHF	swissy
Canadian dollar	Canada	CAD	loonie
Australian dollar	Australia	AUD	aussie
New Zealand dollar	New Zealand	NZD	kiwi

## How Currency Pairs Work

So this is how it goes: trading always consists of buying one currency and selling another. Together these currencies make up a currency pair.

Imagine choosing the USD/JPY pair. You expect the US dollar to increase in value as compared to the yen. So you buy USD and sell JPY. Remember that in order to buy one currency you have to sell another. If the dollar rises against the yen, you close the position and make a profit.

Why is forex trading done in currency pairs? Imagine that the first currency in any currency pair (in our example the USD) is a potato. So in order to buy a potato, you need to pay a certain amount of the second currency (in our example, JPY).

There are 3 categories of currency pairs: major, minor, exotic.

### Majors

Major currency pairs (majors) are traded most frequently, and they all contain the US dollar (USD).

PAIR	COUNTRY OF ORIGIN	MEANING
EUR/USD	Eurozone/USA	Euro – US dollar
USD/JPY	USA/Japan	US dollar – Yen
GBP/USD	United Kingdom/USA	Pound sterling – US dollar
USD/CHF	USA/Switzerland	US dollar – Swiss franc
USD/CAD	USA/Canada	US dollar – Canadian dollar
AUD/USD	Australia/USA	Australian dollar – US dollar
NZD/USD	New Zealand/USA	New Zealand dollar – US dollar

### Minors

Minor currency pairs (crosses) don't contain the USD. The most active ones contain EUR, JPY, and GBP.

EURO MINORS	YEN MINORS	POUND MINORS	OTHER MINORS
EUR/CHF	EUR/JPY	GBP/CHF	AUD/CHF
EUR/GBP	GBP/JPY	GBP/AUD	AUD/CAD
EUR/CAD	CHF/JPY	GBP/CAD	AUD/NZD
EUR/AUD	CAD/JPY	GBP/NZD	CAD/CHF
EUR/NZD	AUD/JPY		NZD/CHF
	NZD/JPY		NZD/CAD

### Exotics

Exotic currency pairs contain one major currency as the base currency, paired with any non-major currency, such as South African rand, Mexican peso, or Danish krone. Exotic pairs are not so widely traded. The table below contains a few examples of exotic currency pairs.

PAIR	COUNTRY OF ORIGIN	MEANING
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PAIR	COUNTRY OF ORIGIN	MEANING
USD/HKD	USA/Hong Kong	US dollar – Hong Kong dollar
USD/SGD	USA/Singapore	US dollar – Singapore dollar
USD/ZAR	USA/South Africa	US dollar – South African rand
USD/THB	USA/Thailand	US dollar – Thai baht
USD/HUF	USA/Hungary	US dollar – Hungarian forint
USD/MXN	USA/Mexico	US dollar – Mexican peso
USD/DKK	USA/Denmark	US dollar – Danish krone
USD/SEK	USA/Sweden	US dollar – Swedish krona

### Forex Advantages

The forex market is unique – and as such, it attracts millions of traders daily, who are busy making money online. What's more, it is open for all investors worldwide. Practically, anyone can trade forex.

### What Makes Forex Exceptional?

#### HIGH LIQUIDITY

Forex is the biggest financial market in the world with a trading volume of over \$6.1 trillion a day. This makes it 53 times bigger than the New York Stock Exchange's daily trading volume. In such a liquid market, you have instant access to money as you can sell your investment quickly and at fair market price.

### TRADING ROUND THE CLOCK

As opposed to any other financial market, the forex market is open 24 hours a day and 5 days a week (22:00 GMT Sunday – 22:00 GMT Friday). You can make your forex deals whenever you are online, and at any time, day or night.

### TRADE LONG OR SHORT – YOUR CHOICE

Whether the market is rising or falling, forex offers you continuous profit potential – something the stock market does not offer. Because forex trading is about buying one currency and selling another, you are always free to trade long or short without any limitations.

### BIGGER LEVERAGE – BIGGER PROFIT POTENTIAL

While for stocks the typical leverage is 2:1, forex trading allows you a leverage of up to 500:1, or even more! No other financial market apart from forex offers this kind of leverage. You can choose the leverage that suits you best.

### SMALL INITIAL INVESTMENT TO START TRADING

You can easily open a trading account with a modest initial investment to start buying and selling currencies. You are free to do this on different levels, depending on your knowledge, skills and risk appetite. Its accessibility is a huge plus!

### NO MANIPULATIVE INFLUENCE

The daily volume of forex is huge! As a result, there are no top dogs who can manipulate the prices. Why should your potential profit (or loss) depend on how

big investment companies trade? This is something that does not happen to forex.

No hedge funds, banks, analysts or brokers can influence the market for an extended period of time. Not only is forex open to everyone, but it also applies the same rules to all investors, no matter how big they are.

### NO MIDDLEMEN

We say that forex is traded over the counter (OTC). This implies that the forex market has no centralized exchange such as a stock exchange. Instead, forex trading is conducted directly between buyers and sellers. Consequently, you have direct online access to the markets without any middlemen charging you extra fees.

### VERY LOW TRANSACTION COSTS

Unbelievable as it may sound, the forex market operates without any clearing fees, exchange fees or brokerage fees. Most forex brokers are compensated for their services through the bid-ask spread. This is usually less than 0.02% under normal market conditions. At FXKAMPALA.COM the spread can be as low as 0.01%.

### MARKET ORDER EXECUTION IN LESS THAN 1 SEC.

Unlike stock and futures markets, the forex market is very liquid and as such you can always execute an order. At FXKAMPALA.COM we are very proud of our no rejections policy: 100% of clients' orders are executed in less than 1 second.

### FREEDOM TO CHOOSE YOUR TRADING STYLE

It is always your choice how and when to trade. The market is there for you 24 hours a day, 5 days a week. You can be an intraday trader and keep your positions open from a few minutes to hours, or you can be an overnight trader and have a trading horizon of days, weeks or months.

Besides, you can use automated trading and let the expert advisors (robots) work for you. Do you need to leave the comfort of your home to trade





forex? No, you don't. It's all online, so all you need is Internet access on your PC, laptop, tablet, or smartphone. You have forex within easy reach at anytime.

### LESS IS MORE

Over 8,000 stocks are listed on the NASDAQ and the New York Stock Exchange. Instead of analyzing and staying abreast with the developments of thousands of stocks, you only need to concentrate on a few currency pairs to make the most of your trading.

While all this looks impressive, the main advantages of forex trading are more than appealing even to someone who knows little about it. But does it sound like something you want? Let's be honest, on some level or another everyone is interested in making money – including you.

The more you will read about it, the more tempted you will feel to embark on your most exciting financial activity ever: forex trading.

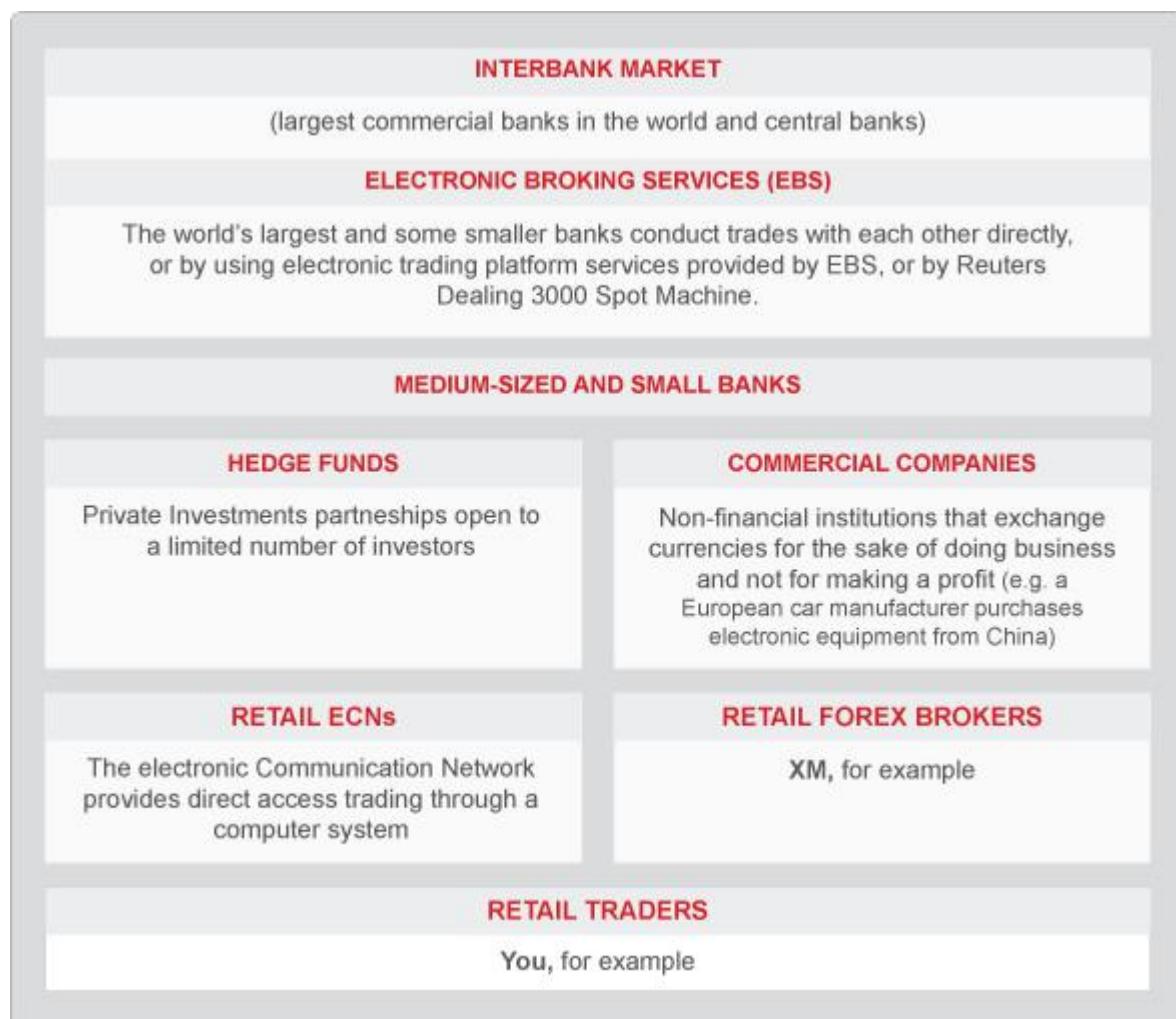
Nobody becomes a professional forex trader overnight. You can learn all about it by following FXKAMPALA.COM tutorials and by actually doing it.

### Forex Players

So far you have learned that in the forex market there is no centralized exchange like a stock exchange. Forex is decentralized: currencies are bought and sold directly between two parties. This is why we call it over the counter(OTC).

This also implies that unlike in the stock exchange market where you have one single price for a currency at a time, in the forex market price quotes vary.

However, a decentralized market does not automatically mean disorganized! Let's see how the forex market is built up and who its key players are.



It is the versatility of the market participants that contributes to the high liquidity of the forex market. In this respect, again, forex is unique.

### Trading Sessions

Now you are a bit closer to forex: you know what it is, how you can benefit from it and who the market participants are. Let's see when you can trade.

Do you remember what you previously learned about the advantages of forex, telling you that the market is open nonstop? Yes, the forex market is open 24 hours a day – allowing you to trade at any time of the day or night. You can trade 24/5 between 22:00 GMT Sunday – 22:00 GMT Friday.

There are 4 main forex trading sessions with opening/closing hours based on the biggest financial centers.

TIME ZONE	GMT
Sydney	Open 22:00
Sydney Close	06:00
Tokyo	Open 00:00
Tokyo Close	08:00
London	Open 08:00
London Close	16:00
New York	Open 13:00
New York Close	21:00

### GMT (Greenwich Mean Time)

#### When to Trade?

Time is money. For this reason, in the 24-hour forex market, timing is critical. Good timing produces good profits. Yes, but which are the best hours/times to trade?

The hot zone is between 13.00 GMT and 16.00 GMT. This is the time when the London and New York sessions overlap.

What makes these hours powerful? Volume and volatility, because they reach their peak during these hours! During this time, the market is busy with active participants, currencies move very quickly, and the most important economic news is also published in this time period.

Volume means that a large number of lots are sold and/or bought for a particular currency pair; while volatility means that the price moves at a great speed.

Volume and volatility during power hours work like gasoline and a spark of fire. In a good way, though! What's more, they may cause large movements in almost all currency pairs.

### Which Currencies to Trade?

The currencies that you can trade because of their high activity and large movements are as follows:

- ✗ EUR/USD
- ✗ GBP/USD
- ✗ USD/CHF
- ✗ USD/CAD
- ✗ GBP/JPY
- ✗ GBP/CHF

Now let's look at the characteristics of each of the trading sessions. Asian Session (22:00 – 08:00 GMT)

The Asian session begins with the Sydney open (22:00 GMT) and ends with the Tokyo close (08:00 GMT).

Japan is the world's third largest forex trading center and even though we call it the Tokyo session, this is not the only busy forex hub during this period. Hong Kong, Singapore and Sydney are active players here, too.

The most traded currency is the yen, of course, covering 16.5% of all forex transactions.

Now let us have a look at the main features of the Tokyo session:

- x Approximately 21% of all forex transactions are carried out here
- x Liquidity (i.e. currency sold without causing significant price movements) can be quite thin at times
- x Because of this thin liquidity most currency pairs will trade within a range, especially if there is a big move in the preceding New York session
- x Most activity takes place at the beginning of the session, as this is the time when economic news is released
- x As during the Asian session economic news from Australia, New Zealand and Japan come out, you will most likely see stronger moves in pairs that contain JPY, AUD and NZD.

### London Session (08:00-16:00 GMT)

London is considered the capital of forex and although there are several financial centers all around Europe, it is London that attracts the main interest as the key financial center. It is no wonder because the London session:

- x Has a huge trading volume (over 32% of all forex transactions are carried out here)
- x Has high liquidity
- x Is the period with most market uptrends and downtrends
- x Has lower spreads
- x Volatility (i.e. overall price fluctuations) slows down a bit in the middle of the London period (for the simple reason that most traders are off for lunch) until the New York trading session starts
- x Market trends may at times reverse just before the session ends as European traders decide to lock their profits.

### New York Session (13:00-21:00 GMT)

When the London session traders come back from lunch, the New York (US) session starts.

Features that mark the US session are as follows:

- x Roughly 19% of all forex transactions are carried out here
- x Big market-moving potential: 85% of trades involve the US dollar
- x High liquidity in the morning hours when it overlaps the London session
- x Most economic news reports are released at the beginning of the session
- x Liquidity and volatility decrease during the afternoon hours
- x Little movement on Friday afternoon + high chances for trend reversal in the second half of the day.

## Trading Styles

The beauty of forex, among other things, is that you can do it anywhere, anytime and you are free to choose your own trading style. This means that you can trade according to your individual personality, knowledge and risk tolerance.

### Which Trading Style to Choose?



Let's learn the basics about the popular trading styles first:

### Intraday Trading

As an intraday trader you hold positions for a short time (from minutes to hours), make many trades a day, and usually enter and close your trades on the same day.

### Swing Trading

Swing trading is similar to intraday trading, but it has a longer trading horizon between hours to a few days.

### Position Trading

This means that you hold positions for a long time (from weeks to years). It's the opposite of intraday trading because you are more interested in long-term investment than in short-term price changes.

### Scalping

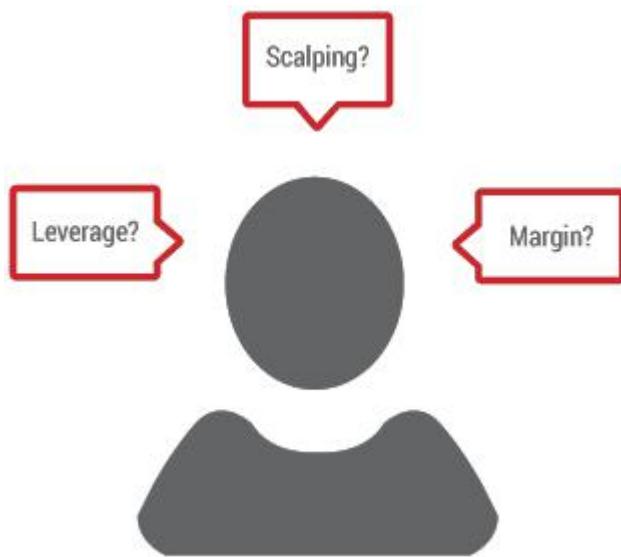
Scalping is very short-term trading. You try to make many small profits during a single trading day.

### Speak Forex

Learning a foreign language starts with the alphabet – and so does forex.

Forex has its own language, that is, special terminology. If you don't want to be embarrassed in front of other traders, it's useful to know that a pip is not a seed in an orange, and execution is not about playing Russian roulette.

### Basic Terms



### Currency Pair

It is the quotation of one currency unit against another currency unit.

For example, the euro and the US dollar together make up the currency pair EUR/USD. The first currency (in our case, the euro) is the base currency, and the second (the US dollar) is the quote currency.

As you see, we use short forms for currencies: euro is EUR, US dollar is USD, and Japanese yen is JPY.

### Exchange Rate

It is the rate at which you exchange one currency for another. The exchange rate shows you how much of the quote currency you need if you want to buy 1 unit of the base currency.

Example: EUR/USD = 1.3115. This means that 1 euro (the base currency) is equal to 1.3115 US dollars (the quote currency).

Now take a quick peek at how the euro is doing against the Japanese yen: for 1 euro I can get 106.53 Japanese yen (i.e. EUR/JPY=106.53). Maybe I'll wait until the euro gets stronger before I exchange it and fly to Tokyo again.

The exchange rate may change in 2 days or 1 week, though. It may even stabilize for a while. Okay, but when? If you're a time freak like me, the when is important to you, too.

The when is a question that nobody can answer precisely. It depends on a great deal of social and economic factors, many of which you'll be watching more closely when you start trading forex.

Why? Because currency rates change all the time, and you want to know when to buy one currency and when to sell another to make a profitable deal.

### Quote

It is a market price that always consists of 2 figures: the first figure is the bid/selling price, and the second is the ask/buying price. (e.g. 1.23458/1.12347).

### Ask Price

Also known as the offer price, the ask price is the price visible on the right-hand side of a quote. This is the price at which you can buy the base currency.

For example, if the quote on the EUR/USD currency pair is 1.1965/67, it means that you can buy 1 euro for 1.1967 US dollars.

### Bid Price

It is the price at which you can sell a currency pair.

For example, if the EUR/USD is quoted at 1.4568/1.4570, the first figure is the bid price at which you can sell the currency pair.

Bid is always lower than ask. And the difference between bid and ask is the spread.

### Spread

It is the difference in pips between the ask price and the bid price. The spread represents the brokerage service costs and replaces transaction fees.

There are fixed spreads and variable spreads. Fixed spreads maintain the same number of pips between the ask and bid price, and are not affected by market changes. Variable spreads fluctuate (i.e. increase or decrease) according to the liquidity of the market.

### Account Currency

It is the currency you choose when you open a trading account with FXKAMPALA.COM. All your profits and losses will be converted into that particular currency.

At FXKAMPALA.COM you can open any kind of trading account you prefer with many base currency options: USD, EUR, GBP, JPY, CHF, AUD, HUF, PLN, or RUB.

So if you open an account in USD but you transfer funds in EUR, the funds will be automatically converted into USD at the prevailing inter-bank price.

### Pip

A pip is the smallest price change of a given exchange rate.

Are you a visual type? Here's an example: if the currency pair EUR/USD moves from 1.2550 to 1.2551, that's a 1 pip movement; or a move from 1.2550 to 1.2555 is a 5 pip movement. As you see, the pip is the last decimal point.

All currency pairs have 4 decimal points – the Japanese yen is the odd one out.

Pairs that include JPY only have 2 decimal points (e.g. USD/JPY=86.51).

### Fractional Pip

It is an extra decimal place in the exchange rate. In the case of non-JPY pairs, we have 1.23456 instead of 1.2345, while in pairs that contain JPY, we have 123.456 instead of 123.45. We call the last decimal place in such pricing a pip fraction or tenth pip.



## Lot

Forex is traded in amounts called lots. One standard lot> has 100,000 units of the base currency, while a micro lot has 1,000 units.

For example, if you buy 1 standard lot of EUR/USD at 1.3125, you buy 100,000 Euros and you sell 131,250 US dollars. Similarly, when you sell 1 micro lot of EUR/USD at 1.3120, you sell 1,000 Euros and you buy 1,312. US dollars.

## Pip Value

The pip value shows how much 1 pip is worth. The pip value changes in parallel with market movements. So it is good to keep an eye on the currency pair(s) you are trading and how the market changes.

Now let's reflect on what you have learnt about pips! To benefit from pips and see significant a increase/decrease in profit, you will need to trade larger amounts. Suppose your account currency is USD and you choose to trade 1 standard lot of USD/JPY. How much is 1 pip worth per \$100,000 on the USD/JPY currency pair?

The calculation formula is as follows:

Amount x 1 pip = 100,000 x 0.01 JPY = JPY 1,000 If USD/JPY = 130.46, then  
JPY 1,000 = USD 1,000/130.46 = USD 7.7 Therefore, the value of 1 pip in  
USDJPY is equal to: (1 pip, with proper decimal placement x amount/exchange  
rate)

Here is another example:

In the EUR/USD pair, a movement from 1.3151 to 1.3152 is 1 pip, so 1 pip is .0001 USD. How much US dollar is this movement worth per \$1,000 micro lot?  
 $1,000 \times 0.0001 \text{ USD} = 1 \text{ USD}$ .

## Margin

Margin is the minimum amount of funds, expressed as a percentage, that you will need if you want to open a position and keep your positions open.

If you trade on a 1% margin, for instance, for every USD 100 that you trade, you need to put down a deposit of USD 1. And so, in order to buy 1 standard lot (i.e. 100,000 of USD/CHF), you need to maintain only 1% of the traded amount in your account i.e. USD 1,000. But how can you buy 100,000 USD/JPY with only USD 1,000? Basically, margin trading involves a loan from the forex broker to the trader.

When you carry out a forex transaction, you don't actually buy all the currency and deposit it into your trading account. Practically speaking, what you do is speculate on the exchange rate. In other words, you estimate how the exchange rate will move, and you make a contract-based agreement with your broker that he will pay you, or you will pay him, depending on whether your estimation has proved to be correct or wrong (i.e. whether the exchange rate has moved in your favor or against your initial speculation).

If you purchase a USD/JPY standard lot, you don't need to put down 100,000 USD as the full value of your trade. Instead, you will have to put down a deposit that we call margin. This is why margin trading is trading with borrowed capital. In other words, you can trade with a loan from your broker, and that loan amount depends on the amount you initially deposited. Margin trading has another big advantage: it allows leverage.

As you can see in our example, your initial deposit serves as a guarantee for the leveraged amount of 100,000 USD. This mechanism ensures the broker against any potential losses. Moreover, you as a trader are not using the deposit as payment, or to purchase currency units. Your broker needs a so-called good-faith deposit from you.

## Leverage

Strictly speaking, through leverage the forex broker lends you money so that you can trade bigger lots:

Leverage depends on the broker and its flexibility. At the same time, leverage varies: it can be 100:1, 200:1, or even 500:1. Remember that with leverage you can use \$1,000 to trade \$100,000 ( $1,000 \times 100$ ) or \$200,000 ( $1,000 \times 200$ ), or \$500,000 ( $1,000 \times 500$ ).

This sounds great, but how does it actually work? I open a trading account and I get a loan from my broker as simply as that?

Firstly, it depends on what type of account you open, what the leverage for that particular account type is, and how much leverage you need. Don't be greedy – but don't be too shy, either. Leverage can be used to maximize gains – but also losses, if you are too greedy.

Secondly, your broker will need an initial margin on your account, that is, a minimum deposit.

### How this works?

You open a trading account that has a leverage of 1:100. You want to trade a position worth \$500,000 but you only have \$5,000 in your account. No worries, your broker will lend you the remaining \$495,000 and sets aside \$5,000 as your good faith deposit.

The profits that you make by trading will be added to your account balance – or, if there are losses, they will be deducted. Leverage increases your buying power and can multiply both your gains and losses.

Always choose a broker that offers no negative balance protection, and so your losses will never exceed your capital.

This means that if your loss reaches USD 5,000, your positions will be closed automatically so that you will not end up owing money to your broker.

### Equity

It is the total amount of money in your trading account, including your profit and losses. For instance, if you deposited USD 10,000 into your account and you also made a profit of USD 3,000, your equity amounts to USD 13,000.

### Used Margin

It is the amount of money kept aside by your broker so that your current trading positions can be kept open and you don't end up with a negative balance.

### Free Margin

It is the amount of money in your trading account with which you can open new trading positions.

Free margin = Equity – Used Margin.

This means that if your equity is USD 13,000 and your open positions require USD 2,000 margin (used margin), you are

left with USD 11, 000 (free margin) available to open new positions.

### Margin Call

Margin calls are a major part of risk management: as soon as your Equity drops to a percentage of the margin used, your forex broker will notify you that you need to deposit more money if you want to maintain your position. At FFKAMPALA.COM this percentage is 50%.

### Profit/loss Calculation

Now that you're not a complete beginner any more, let's get down to calculating your profit (or loss).

We will take the USD/CHF currency pair. You want to buy USD and sell CHF.

The quoted rate is 1.4525 / 1.4530.



Step 1: you buy 1 standard lot of 100,000 units at 1.4530 (ask price). Wait! In the meantime the price has moved to 1.4550, so you decide to close the position.

Step 2: you can see the new quote for your USD/CHF currency pair. It's 1.4550 / 1.4555. You are already closing your position, but don't forget that you initially bought a standard lot to enter the trade. Now you are selling in order to close your trade. You must take the bid price of 1.4550.

Step 3: you start calculating. What do you see? The difference between 1.4530 and 1.4550 is .0020. This equals 20 pips.

Do you remember our calculation formula earlier? You will be using it now.

$$100,000 \times 0.0001 = \text{CHF } 10 \text{ per pip} \times 20 \text{ pips} = \text{CHF } 200 \text{ or USD } 137.46$$

Important! When you enter and exit your position, you must always watch the spread in the bid/ask quote.

As you learnt it before, you use the ask price when you buy a currency, and the bid price when you sell a currency.

### Position

It is a trade that you hold open during a certain period of time.

### Long Position

When you enter a long position, you buy a base currency.

Supposing that you choose the EUR/USD pair. You expect the EUR to strengthen as compared to the USD, so you will buy EUR and profit from its increase in value.

## Short Position

When you enter a short position, you sell a base currency. If you choose the EUR/USD pair again, but this time you expect the EUR to weaken as compared to the USD, you will sell the EUR and profit from its decrease in value.

## Close a Position

If you enter a long (buy) position and the base currency rate has gone up, you want to get your profit. To do so, you must close the position.

## Order Types

### Market Order / Entry Order

It is an order to buy or sell currency instantly at the current price.

### Open Order

It is an order to buy/sell a financial instrument (e.g. forex, stocks, or commodities like oil, gold, silver, etc.) that will stay open until you close it, or you have your broker close it for you (e.g. via telephone trading).

### Limit Order

It is an order placed away from the current market price.

Assuming that EUR/USD is traded at 1.34. You want to go short (place a sell order on this currency pair) if the price reaches 1.35, so you place an order for the price 1.35. This order is called limit order. So your order is placed when the price reaches the limit of 1.35. A buy limit order is always set below the current price whereas a sell limit order is always set above the current price.

### Stop-entry Order

It is an order that you give to buy above the current price or an order to sell below the current price when you think the price will continue in the same direction. It is the opposite of a limit order.

Let's assume that EUR/USD is traded at 1.34. You want to go long (i.e. place a buy order on this currency pair) if the price reaches 1.35, so you place a stop-entry order to buy at 1.35. This order is called stop-entry order.

### Take Profit Order (TP)

It is an order that closes your trade as soon as it has reached a certain level of profit.

### Stop-Loss Order (SL)

It is an order to close your trade as soon as it reaches a certain level of loss.

With this strategy, you can minimize your loss and avoid losing all your capital.

You can make stop-loss orders with automated trading software. It's a great thing because even if you're on holiday when you don't watch how the market and currency rates change, the software does it for you.

### Execution

It is the process of completing an order.

When you place an order, it will be sent to your broker, who decides whether to fill it, reject it, or re-quote it. Once your order is filled, you will receive a confirmation from your broker. Unlike other forex brokers, FXKAMPALA.COM operates with a strict No Rejections and No Re-quotes policy.

It is crucial to have your orders executed quickly. If there is a delay in filling your order, it can cause you losses. That is why your forex broker should be able to execute orders in less than 1 second. Why? Forex is a fast-moving market – and many forex brokers don't keep pace with its speed, or purposefully slow down execution to steal a few pips from you even during slow market movements.

## Re-quote

A re-quote is an unfair execution method used by some brokers. It occurs when your broker doesn't want to execute your order on the price you entered, and slows down execution for its own benefit.

How does this take place?

- x You decide to buy or sell a currency pair at a certain price;
- x You press the button to place your order;
- x Your broker receives the order;
- x You receive a re-quote notification on the trading platform you're using;
- x You can either cancel your order or accept a worse price. How can you avoid re-quotes?
  - x Choose a forex broker with a no re-quotes policy;
  - x Place a limit order: inform your broker in advance that you are only open for placing an order at a certain price or better.

Now you have taken your first baby steps and learned to toddle around in the world of forex. And most importantly, you now know the basic forex terminology. It's time to open a demo account and start practicing with virtual money. However, before you do that you have to make two important decisions: you need to choose a broker and a trading platform.

### Choose your Broker

The market is full of online brokers – and each one claims to be the best.



However, you are not looking for perfection. You want a regulated broker with low spreads, low minimum lot size, outstanding execution, technical tools, and flexible leverage.

- x Is your broker licensed and authorized to operate its services? If not, your money and potential trading profits are at constant risk!
- x Does your broker guarantee safety of client funds? This means that your money is kept separated from the broker's own assets, and so the broker is not allowed to use it.
- x Does your broker offer tight spreads? The tighter the spreads, the better value you get. Why? Wider spreads mean a higher ask price and a lower bid price. In other words, with wide spreads you'll find it difficult to make a profit because you pay more when you buy and you get less when you sell.
- x Does your broker provide spot on execution? That's crucial! It means that your trading orders are carried out without delay, at the best market price possible, without rejections or re-quotes.
- x If you are a beginner, trade small lots – this means lower risk. Choose a broker that offers trading accounts with micro lots and a low minimum deposit.
- x Choose a broker who provides you with all the necessary market information and analytical tools to make profitable trades.
- x A good broker allows you to change the leverage if and when you want. Brokers that force you to use the same high leverage only want you to lose your money. So your broker should ideally allow you to increase/decrease your
  - x leverage by a single e-mail.
  - x Your broker should ideally offer you a great selection of trading platforms with top notch facilities: a high number of tradable financial instruments, streaming market news and technical analysis. These

platforms must be cutting-edge web-based entities that contribute to investment growth and safety.

- ✗ Forex is a 24-hour industry, and you as the client fully deserve to be provided with professional support round the clock. The ideal broker is by your side with 24-hour customer support via live chat, email, and telephone in a variety of languages. Ideally, a dedicated Personal Account Manager is at your service 24 hours a day to assist you with your inquiries and to help you make the best of your trading activity.
- ✗ In forex speed is vital. And this also applies to withdrawals. A professional broker guarantees 100% automatic deposits and same-day withdrawals with a variety of payment methods that meet the needs of a varied client base – and he does this without hidden fees or commissions.
- ✗ Without knowledge and practice there's no gain – at least, not in the long run. Choose a broker with a rich forex educational program, ideally free of charge trading tutorials, as well as free and regular webinars and seminars held by professionals.

### Choose a Trading Platform

Also called trading software, a trading platform is computer software through which you conduct your trades online.

Imagine it as a platform that connects you to the forex market online – and most importantly through the broker that provides it for you for free.

What do you need for it? Internet connection → download → install. It's as simple as that.

Where can you get it? From an online forex broker's website that you choose to trade with.

Which trading platform should you choose? The most popular, and also the best software available for trading forex today, is MetaTrader. You may have heard about it already.

With FXKAMPALA.COM, for example, you can

- × Download and install MetaTrader for free
- × Access the market online in real-time
- × Simulate your demo trading so that it looks 100% real
- × Test and improve your strategies
- × Follow market updates
- × Use expert advisors (EAs) that carry out buy/sell orders for you automatically
- × Have full online technical support in over 20 languages
- × Manage your account comfortably
- × Have access to over 30 technical indicators to analyze price quotes
- × Carry out many trading orders simultaneously
- × Trade on multiple currencies
- × Take advantage of the one-click trading feature

## Demo Trading

Now you know the basics, you have chosen your broker, and you are even ready to open a demo account.

Having a demo account means the following:

- ✗ You will trade on the live market
- ✗ It is for free, and you can use it as long as you want
- ✗ It simulates real trading conditions, but does not expose you to risk
- ✗ You trade with virtual currency – with no danger of losing real money
- ✗ You can test all possible trading strategies as many times as you want
- ✗ You can learn to use a trading platform at your own pace
- ✗ You can learn to read charts, follow market trends, open and close

orders. Disadvantage

Demo trading only exposes you to virtual risk, so it does not really give you the feel of proper risk management. Dealing with your emotions is as important as dealing with your money. And a virtual world doesn't involve real emotions to the full.

So how can you learn to keep emotions out of your trading

decisions? Solution

Open a demo account, use it to test the basics, and after a while open a real trading account fit for beginners with smallest minimum deposit and flexible leverage.

And now you may ask yourself: when is the best time to switch from demo to real? A reasonable question to which there is no definitive answer. Forex

trading is a learning process the duration of which depends on the individual. Besides, it also depends on your investment needs, expectations, and the time you dedicate to it.

At FXKAMPALA.COM, you can keep your demo account parallel to your trading account for an unlimited time. You have the freedom to use your demo account to test strategies, and then use the most effective ones on your real account.

### Trading Advice

Is forex trading your cup of tea? You will know this after you have been doing it for a while. But nothing ventured, nothing gained, right?

### Forex is not Gambling

Forex trading is not about gambling or testing your luck at the roulette table. And it's not about hitting the jackpot with a single lottery ticket. There's much more to it!

A gambler is someone who risks his money and has no influence over what will happen to it. If he's lucky, he wins – if he's unlucky, he loses. A trader, on the contrary, is someone who decides for himself. He follows the market movements and decides when to take the profit. If the market turns against him, he decides how much he wants to risk.

### Learn and Practice

Every trader can have ups and downs in the forex market – just like in everyday life. To have more ups than downs, try to take it seriously, get to know more about it, build your own strategies, and follow a trading plan. But we will also tell you more about this later.

Also, don't expect immediate success. A little knowledge is a dangerous thing – this doesn't mean that you need to

study every single aspect of trading to make good profits, but try to develop your knowledge and skills gradually over time.

### Do It the Clever Way

Knowing what you want from forex trading is the best starting point. It's easy to take a plunge into it right away, but having a good plan before you do it will work out better for you in the long run. Give yourself time to adapt to forex, and you may even discover your hidden talents.

It would be naïve to think that it's always easy or that trading forex will make you the Shah of Persia in two days. Forex has amazing opportunities, but you must be clever and know what, how, when to trade.

### Consider These Trading Tips

- x Understand the basics of forex trading
- x Choose a regulated online broker with excellent trading conditions
- x Start 100% risk-free trading on a demo account
- x Choose the right trading tools and learn how to analyze the market
  - x Watch the market, as it's never the same – and adapt your decisions to how it moves up or down
  - x Learn to read trading charts and indicators
  - x Develop your own trading system
  - x Keep a trading diary and note what works and what doesn't so that you don't make the same mistake twice

- x Know your strengths and weaknesses
- x Forget about emotions when you sit down to trade and don't start banging the wall if you closed a trade that didn't work out as you hoped
- x Keep a cool head and be patient, remember to follow your trading system and act when the best trade shows up!

## Getting Ready

So far you have learned about forex and the basics. You have also decided that forex trading is your cup of tea. And now you are eager to know more!

Imagine that you are out in a market, shopping for your Sunday lunch. You have a shopping list and a budget for the ingredients. You know what to buy and at which stall, because this is not your first time here. You even know the market sellers by name. It's almost like a routine.

Bluntly speaking, that's the way you prepare for forex trading. You know the market, you have a plan, you follow market price changes, and you use the right combination of ingredients to make a profitable deal.

## Preparing for Forex Trading

Before anyone can start trading, it is necessary to study the market first. We need to look at different factors that are affecting prices and also examine what happened in the past that caused prices to move in a certain direction.

If you go blindly into trading you are sure to lose a large amount of money. It would be pure gambling. While it is a fact that all traders lose money at some point, and we cannot avoid losses, what we can do is minimize our losses. Through careful planning and analysis of the markets and the use of different methods, we can achieve this.

## Fundamental, Technical and Sentiment Analysis

The three big shots of market analysis that will help you immensely are fundamental, technical, and sentiment analysis.

Fundamental analysis involves looking at economic, political and social factors that affect the market. For example, with regards to the forex market, we would examine interest rates, inflation, unemployment data, GDP, monetary policy, government elections, and so on. The aim of this analysis is to study the causes of the market movement.

Technical analysis however, studies market action primarily through the use of charts for the purpose of predicting future price trends. It is said that everything that can possibly affect price is already reflected in the charts.

Following on from this is the belief that the market basically represents traders' feelings about the market, and thus represents their sentiment. This is where sentiment analysis comes in. It studies whether the market is bullish or bearish. By taking market sentiment into consideration it will help you when creating a trading strategy. For example, if a market is bullish, you have the opportunity to enter a buy position.

It is hardly possible to say which of the three types of analysis is best, since each method is unique and takes into account different factors. However, it is a good idea to try and use all three. Technical analysis is gaining popularity these days and we will look into this method of market analysis in greater detail later.

## What is Technical Analysis?

A popular way of analyzing the markets is through technical analysis. This method uses charts to study price movements based on information from the past. The purpose of technical analysis is to forecast the future direction of prices. We will be looking at the various tools and techniques used in this type of analysis.

### Principles of Technical Analysis

Three key principles form the basis of technical analysis

- x Market action discounts everything

- x Prices move in trends
- x History repeats itself

### Market Action Discounts Everything

This fundamental principle of technical analysis is the belief that a market's price reflects all relevant information. This means that anything that can possibly affect price, such as economic, political, social or psychological factors, have already been taken into account by the market. All reactions of traders to such factors are represented in the charts.

#### Prices Move in Trends

Technical analysts believe prices move in trends and as such their goal is to identify the existing trend and follow it. This principle originates from the Dow Theory. The three main trends of price action are: up, down and range.

#### History Repeats Itself

Another basic premise of technical analysis is that investor behavior tends to repeat itself over a period of time. Technical analysts believe that this behavior will create identifiable price patterns on a chart which can be studied to predict similar future price patterns.

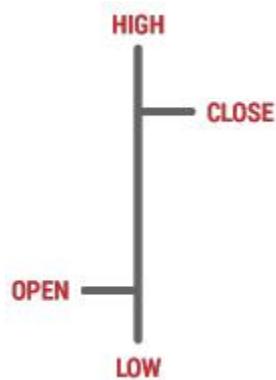
#### Types of Charts

Different chart types can help you analyze price action, the three most commonly used being

- x Bar Chart
- x Line Chart

x Candlestick Chart

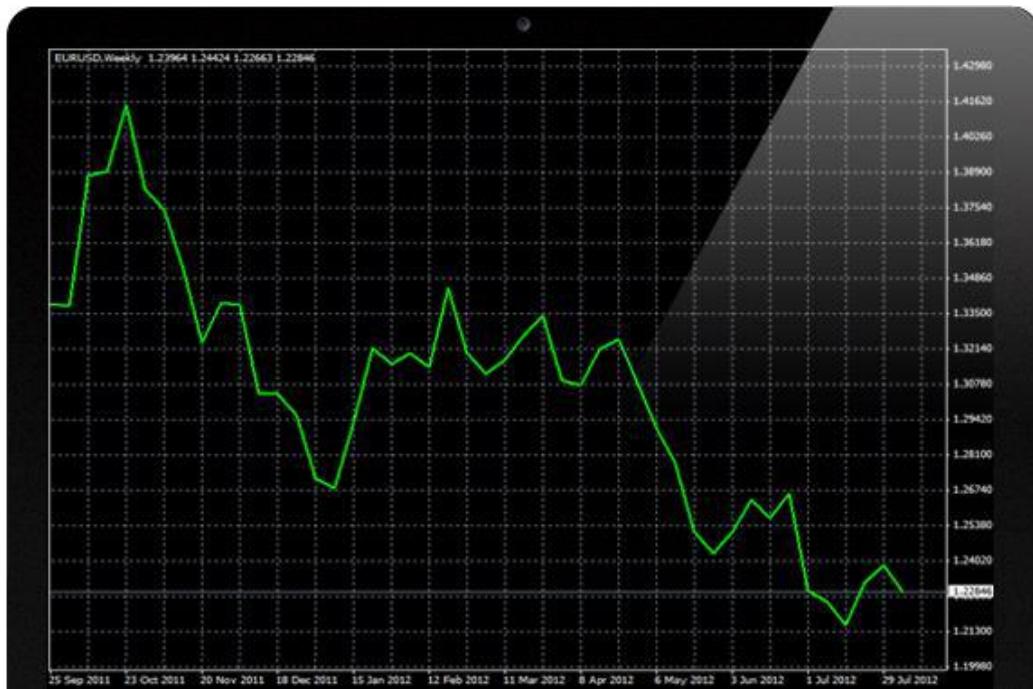
Bar Chart



This chart type is made up of vertical bars each showing the open, close, high and low of prices. Each vertical bar represents the range of each time period. The top of the vertical bar indicates the highest price while the bottom of the bar represents the lowest price at that particular time. The opening price is shown by the tick to the left of the bar and the closing price is the tick on the right.



Line Chart



The line chart connects all the closing prices with a line, which shows the general price movement.

### Candlestick Chart

The candlestick chart is very popular amongst traders because it shows a lot of information regarding price. From this type of chart we can obtain the open, close, high and low of prices, just like in a bar chart.



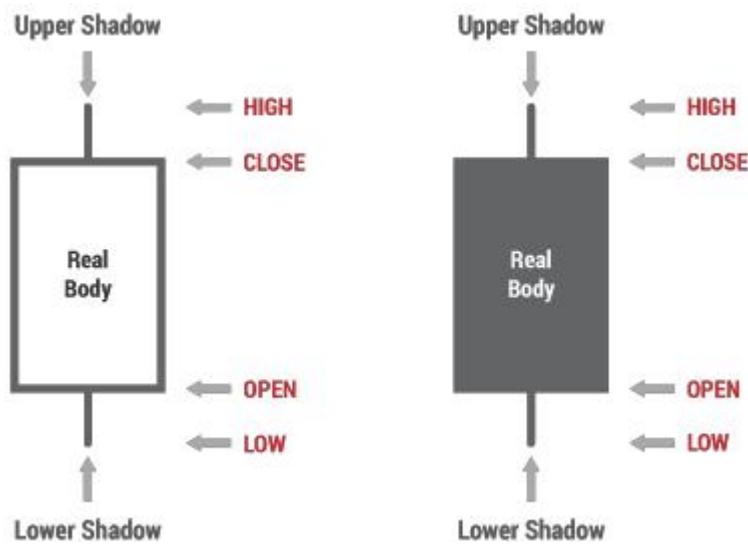
The difference between a candlestick chart and a bar chart is that visually, candlestick charts are easier to use when trading and performing technical analysis.

The reason is because candlesticks are good at identifying market turning points. We are able to identify swing highs and swing lows. For example, they show reversals from an uptrend to a downtrend or a downtrend to an uptrend. Also, the candlesticks sometimes form a certain formation like a shooting start and a doji, which also help us identify a possible trend reversal. We will learn more about this later.

### The Body of a Candle

The candles on the chart have what is called a body. This body shows us the open and close prices. If the body has a wick, (sometimes called a shadow), then these wicks record the highs and lows of the price at a particular time. Each candlestick represents the range of the time period.

When candlestick charts were first developed by the Japanese in the 1600's, they used black and white candles.



A white candle means that the closing price was higher than the opening price during that time period represented by the candle.

A black candle shows the opposite, meaning the closing price was lower than the opening price.

The shadow on the top of the body of the candle represents the highest price traded during the time period and the shadow below the candle represents the lowest price.

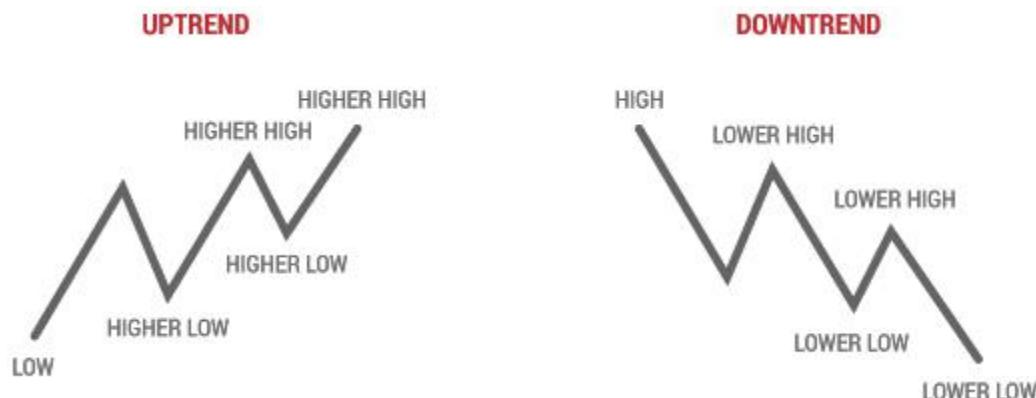
Of course, today with the use of technology and online trading platforms, it is possible to use different colors for the candles.

## Trend

Before you start trading, you need to identify the trend of the market.

This involves finding the general direction of price movement. We can observe on any chart and in any time frame that markets do not move in a continuous straight line but instead create a series of peaks and troughs. By studying the

direction of these tops and bottoms, we can see whether the trend is up, down or in a range.



When price action creates higher successive peaks and higher successive bottoms, then we can say the trend is up.

On the other hand, when lower and lower peaks are formed, along with successive lower troughs, we can say the trend is down.

When price action moves sideways to create horizontal peaks and troughs, the trend is said to be in a range.

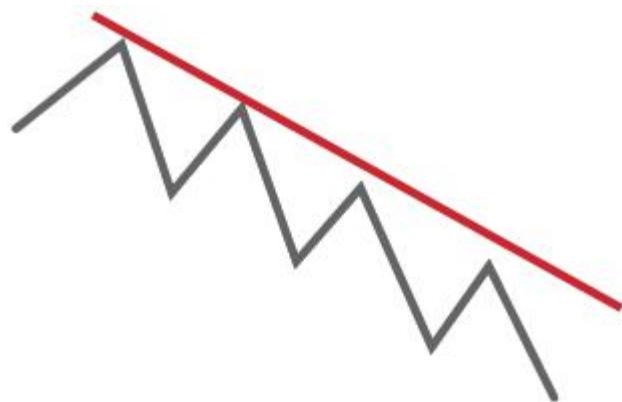


## Trend Lines

To help us identify the trend of the market, we use trend lines.

### Downtrend Line

In a downtrend we draw a straight line downward, connecting as many successive peaks as possible.



This is how a downtrend would look like on an MT4 chart.



### Uptrend Line

In an uptrend we draw a straight line upward to connect all the successive troughs.



This is how an uptrend would look like on an MT4 chart.



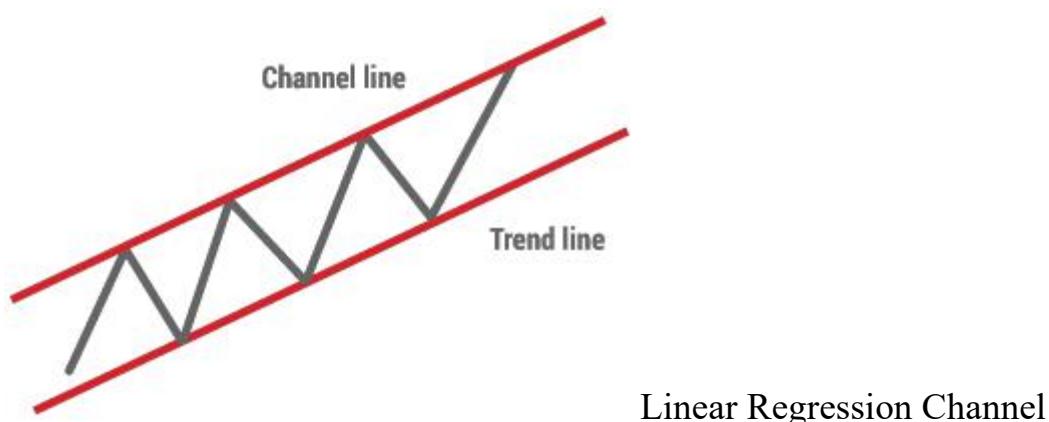
The more peaks or troughs are connected with the trend line, then the more valid the trend line will be. If the trend line connects more than two points, it is called a valid trend line. If only two points are connected, then it is a tentative trend line.

A break of the trend line could suggest a change in the trend. This will be discussed in more detail later.

Remember that while a penetration of a valid trend line is a signal that the trend might reverse, it could sometimes be a false signal. We could wait for at least two closes of the candle above or below the trend line to confirm.

## Channels

The channel is a variation of the trend line technique. Prices trend between two parallel lines – the trend line and the channel line. The longer the channel remains intact and the more often it is successfully tested, the more important and reliable it becomes.



Apart from a simple straight line, the linear regression channel can be used as a type of trend recognition technique. It consists of two outer parallel lines on either side of the linear regression line to form a channel within which prices will move.

The linear regression line in the middle is basically a line that best fits all the prices (that we are considering). The upper and lower lines are usually two standard deviations above and below the linear regression line.

On the MT4 chart the channel is drawn from left to right. In an uptrend it will be drawn from the lowest trough upwards to the highest peak on the chart. In a

downtrend, the channel is drawn from the highest peak downwards to the lowest trough.

The longer the channel line remains intact, meaning the longer the price action remains within the channel, then the stronger the trend will be.

Below is an example of a linear regression channel in a downtrend. We can see that for the most part, prices remained within the channel, keeping the downtrend intact. However, prices eventually moved out of the channel and began moving upwards. This gave a signal that the downtrend ended.



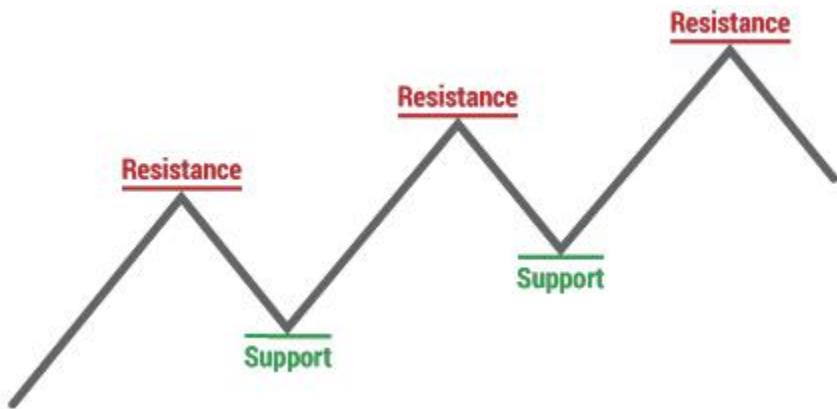
And here is an example of a linear regression channel in an uptrend.



## Support and Resistance

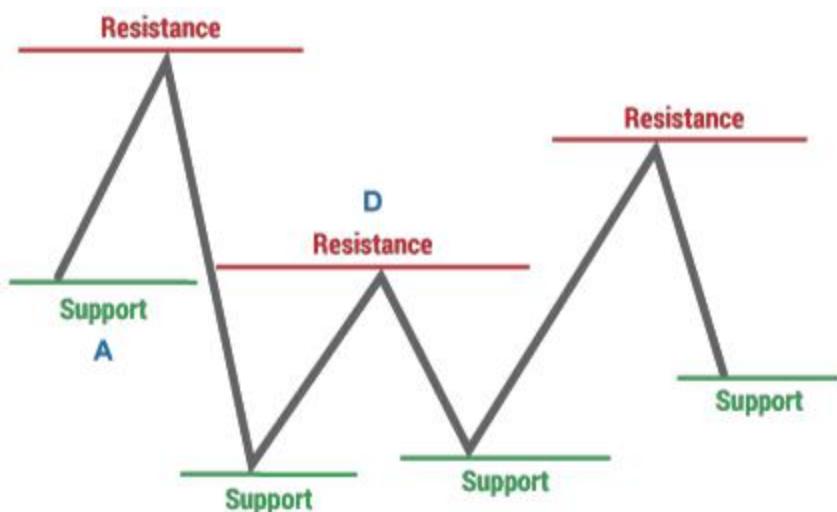
### What is Support and Resistance?

The market does not move in a continuous straight line but rather in a zigzag pattern, creating peaks and troughs. Hence, price action results in the formation of various levels which provide a cushion or support when prices fall, or create a ceiling or resistance when prices rise. These levels are appropriately called support and resistance levels. Prices usually bounce off these levels each time to create new peaks and troughs.



### What Creates Support and Resistance Levels?

Support is the price level at which demand (buying power) is strong enough to prevent the price from declining further. So when prices fall to a certain level, the prices are cheap enough that it results in many buyers entering the market. This eventually lifts prices higher, causing the market to bounce back up. Resistance is the price level at which supply (selling power) is strong enough to prevent the price from rising further. The logic behind this is that as prices become more expensive, more sellers enter the market to take advantage of these high prices and make a profit. This results in prices eventually falling, until they reach a certain support level.



Note in the diagram above how support and resistance can switch roles. For example, the support level at point A later became a resistance level at point D. Once the first support level is broken, another is created and the previous support level now becomes a resistance level. Sometimes we do not know whether the support or resistance level was broken permanently and if prices will continue past these levels to create new support or resistance levels. There will be occasions when these levels can be temporarily broken because the market is simply testing those levels. For example, looking at this chart we can see that prices broke below the support level. At those times it seemed like the market was breaking support. However, in hindsight we can see that the market was merely testing that level. The more often price tests a level of support or resistance without breaking it, then the stronger the area of resistance or support becomes.



## Reversal Patterns

Technical analysts study chart patterns because they give a good indication of market behavior. Certain chart patterns also give a signal if the trend will be changing direction.

The main chart patterns we will look at are reversal patterns and continuation patterns.

Reversal patterns indicate that an important reversal in the trend is taking place. Continuation patterns suggest that the trend is only temporarily pausing for a correction and will most likely continue in the same direction.

A prerequisite for any price pattern is the existence of a prior trend. The first signal of an impending trend reversal or continuation is often the breaking of an important trend line. The longer a pattern takes to complete and the greater the price fluctuations within it, the more substantial the subsequent move is likely to be. Reversal patterns take much longer to form than continuation patterns.

We begin our study with reversal patterns.

### Reversal Patterns

A reversal pattern is a transitional phase that marks the turning point between a rising and a falling market. If prices have been advancing, the enthusiasm of buyers has outweighed the pessimism of sellers up to this point, and prices have risen accordingly.

During the transition phase, the balance becomes more or less even until finally, for one reason or another, it is tipped in a new direction as the relative weight of selling pushes the trend down. At the termination of a falling market, the reverse process occurs.

Imagine a fast moving train, which takes a long time to slow down and then goes into reverse. The same is normally true of financial markets!

The most important reversal patterns are:

- x Head and Shoulders & Inverse Head and Shoulders
- x Double Tops and Bottoms
- x Triple Tops and Bottoms
- x Spike (V)
- x Rounding (or saucer) Bottom

### Head and Shoulders

The head and shoulders pattern is one of the most famous and most recognizable of all reversal patterns. It must be noted that there must be an existing prior trend to reverse in order for the pattern to be valid.



Referring to the chart above, we can see a head and shoulders pattern. Prior to this pattern there was an uptrend. Prices are rallying higher with greater momentum to create the highest peak which is called the head. The lower peaks on either side of the head are called shoulders. A neckline is drawn by connecting the lowest points of the two troughs on either side of the head.

As prices breakout and fall below the neckline at the right shoulder, this signifies a reversal in the prior trend. A downtrend now takes place.

In this chart formation, a sell position can be entered at the breakout point below the neckline.

### Inverse Head and Shoulders

Now let us take an example of an inverse head and shoulders pattern. It works the same way as a normal head and shoulders pattern, the only difference is that the head is upside down!



By looking at the chart, we can see that there was a downtrend, with the head making the lowest low. Prices subsequently failed to make a lower low, hence we have the right shoulder. Then prices penetrated the neckline, to reverse to an uptrend. Notice how prices found support at the neckline level.

A buy position could be entered at the break out point from the neckline.

### Price Target

Once we have identified the head and shoulders pattern and confirmed that the trend has reversed, we can also use this pattern to find our price target. The

method we use is to take the vertical distance from the head to the neckline. Next we go to the breakout point on the neckline and project this distance from there. The price target is an approximation of the possible distance that prices will move.

Look at the example below.

The length of the red vertical line from the neckline to the head is projected from the breakout point of the neckline downwards. This will give an approximate price target. So if you enter a sell position at the breakout point, your exit would be at this target level.



The same method applies to the inverse head and shoulders. If you entered a buy position at the breakout point, you can calculate the target price where you can exit and close your position with profit.



## Double Tops and Bottoms

### Double Tops

The double top pattern is another type of reversal pattern which has two peaks at about the same level. These are the highest peaks reached after an uptrend, where prices find strong resistance. Double top patterns signal a reversal from an uptrend to a downtrend.

When prices are rallying higher in an uptrend, they reach the first top (peak) then retrace slightly to find a support level before bouncing back up.

Prices are unable to rise higher than the first peak and find strong resistance at the price level reached by the first peak. Subsequently prices fall back down. After testing the resistance level for the second time, prices fall back down and penetrate the neckline. This is when we have the double top pattern and the reversal in the trend is confirmed.

Just below the breakout point you have the opportunity to enter a sell position.

Look at the example in the chart below. USDJPY began to lose strength as the double top chart pattern formed and this resulted in a price reversal.



## Price Target

Just like in the head and shoulders situation, it is possible to calculate a price target in the double tops case after prices breakout and we have a trend reversal.

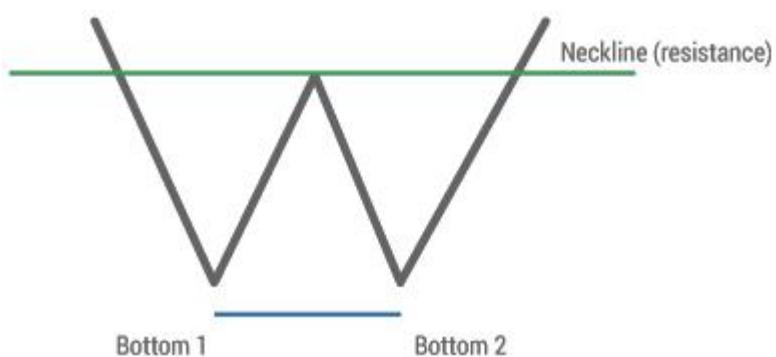
You would measure the distance from the neck line to the peak and take that distance and project downwards from the neckline. This would give you the minimum distance prices will move. In this case, USDJPY fell further from the target price level and you would have made a nice profit!



## Double Bottoms

The double bottoms chart pattern is a reversal pattern that signals a change in price direction. It is basically the opposite of a double top reversal pattern. This pattern signals the reversal of a downtrend into an uptrend.

The image below demonstrates clearly that a double bottom pattern is easily recognizable since it looks like the letter “W”.



A double bottom pattern usually forms in a situation when sellers are battling against buyers but sellers eventually fail to be in control. More buyers enter the market and push prices higher.

During a downtrend prices are reaching new lows until they find support which prevents prices from falling further. This creates the first bottom which is the lowest level. Prices soon bounce off support and retrace up to a resistance level. When prices fail to break resistance, there will be another sell off to the previous low. The re-test of the support forms the double bottom on the chart pattern. Subsequently prices climb higher after failing to break support. The double bottom formation is completed when prices break above the neckline (resistance level).

Let us look at an example of a double bottom pattern. In the chart below, we have EURAUD in a downtrend. The pair weakened its fall and a double bottom pattern formed, with prices subsequently reversing to move upwards.

An opportunity to buy occurred just above the neckline when prices breakout above it.



## Price Target

Just like in the double tops situation, it is possible to calculate a price target in the double bottoms pattern after prices breakout and we have a trend reversal.

You would measure the distance from the level of the two bottoms to the neckline and take that distance and project it upwards from the neckline. This would give you the minimum distance prices will move.

We can see that the price target was reached in this scenario. If you entered a buy position at the breakout and exited at the price target you would have made a good profit!



## Triple Tops and Bottoms

### Triple Tops

The triple top chart pattern is similar to the double top. It is also a bearish reversal pattern with the difference being that there are three “tops”, as the name suggests.

All three tops should be approximately at an equal level. It does not have to be exact, but very close. These three highs create a “resistance” level. Hence, prices rally to this level and test it three times. Prices are unable to break resistance and eventually reverse direction and the trend becomes a down trend.

During the formation of the pattern, a support level was also formed, which prices bounced off when attempting to rally but met resistance and fell back down to this support level. The triple top reversal is completed only until this support level is broken to the downside. This confirms the reversal of the prior uptrend. Upon breaking the support line, this is a good opportunity to enter a short position.



### Measuring the Price Target

Measure the vertical distance from the highest peak to the lower bottom between the three tops. Use this same distance and project it downward from the breakout point at the support line.



### Triple Bottoms

The triple bottom chart formation is the exact opposite of the triple top pattern. It is a bullish reversal pattern, meaning it shows the reversal of the prior downtrend to an uptrend.

During the formation of the pattern, prices which are in a downtrend reach a strong support level which they attempt to break three times. This results in the formation of three troughs, or bottoms, hence giving the name triple bottom.

These three troughs are at around the same level and form the support line. Each time prices attempt to break the support line, they bounce back up to the resistance line. Once prices breakout from this resistance line to the upside, the pattern is complete and the trend is confirmed to have reversed.



### Measuring the Price Target

Measuring the price target is similar to that with the double bottoms pattern. Take the vertical distance between the lowest bottom and highest peak and project that distance upwards from the breakout point at the resistance line.



### Spike (V) Reversal Pattern

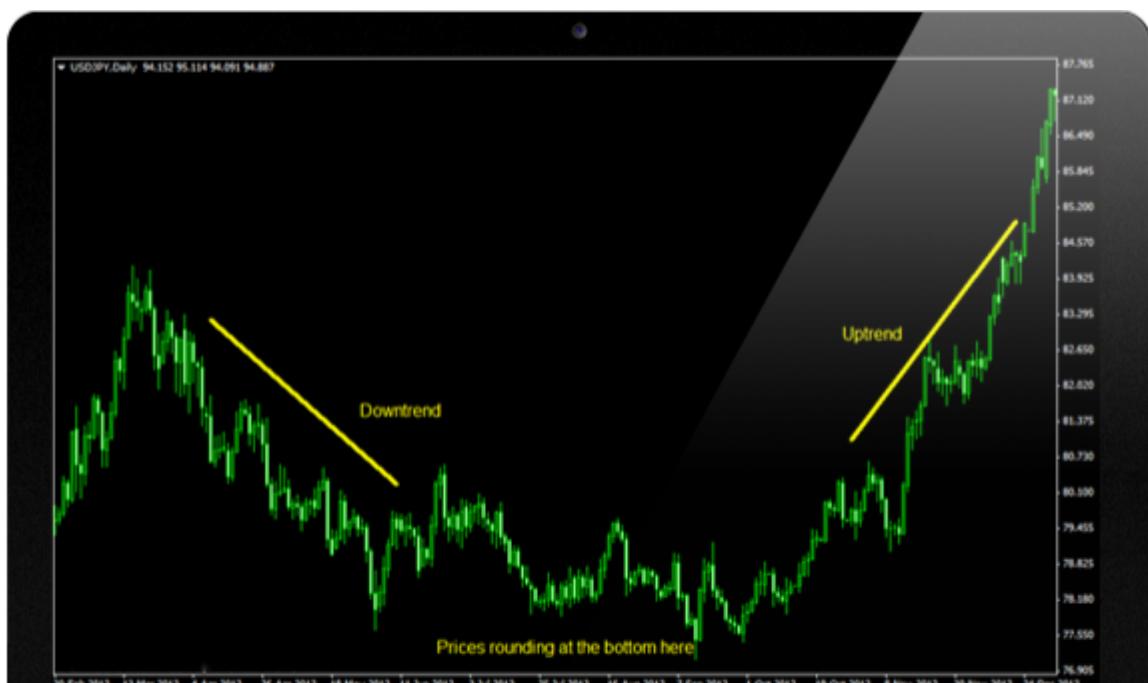
Most spike reversal patterns (also called V-Reversal patterns) are formed after a sharp previous trend. Prices reverse direction without giving any signals and as such this is known as the market turning on a dime. This situation is difficult to trade and it is best to stay out of the market.

Sometimes when a spike occurs the only recourse we may have is to check oscillators that show if the market was over-extended.



## Rounding Bottom

The rounding bottom (saucer) pattern is another type of reversal pattern. Unlike the spike reversal pattern, it takes longer to form and prices change direction very gradually. Saucers are usually spotted on weekly or monthly charts that span several years.



## Continuation Patterns

Continuation chart patterns are formations that show sideways price action.

Unlike reversal patterns which indicate a change in the trend, continuation patterns actually show that there is a temporary pause in the trend where prices consolidate after a big move.

After such a huge price rally, buyers usually take a pause to “catch their breath” before continuing their previous actions. Likewise, after a big drop in prices, sellers will pause, often closing existing short positions to take profits before continuing to sell again. Due to these actions, prices consolidate during traders’ pauses and end up forming certain patterns.

The formation of the continuation patterns is said to be complete after prices break out and continue in the direction of the prevailing trend.

### Continuation Patterns

The most common continuation patterns are:

- ✗ Triangles
- ✗ Wedges
- ✗ Pennants
- ✗ Flags
- ✗ Rectangles

Triangles and wedges are intermediate term continuation patterns whereas flags and pennants are short term patterns.

## Triangles

There are three main types of triangles:

- x Symmetrical
- x Ascending
- x Descending

The ascending triangle is bullish whereas the descending triangle is bearish. The symmetrical triangle is a neutral pattern.

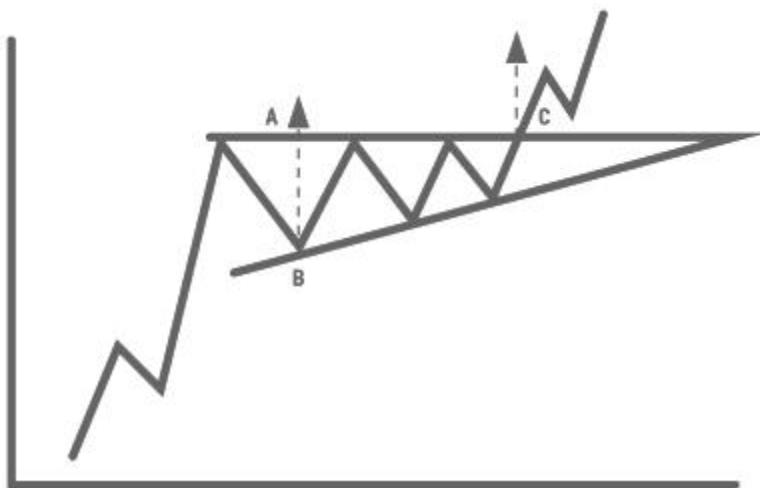
Triangle patterns usually have a minimum of four to six reversal points which are required to form the shape of the actual triangle. The more times the triangle is tested the more durable it becomes and the stronger the breakout will be. The formation usually lasts about one to three months long.

### Trading the Triangles

The best way to trade the triangles is to trade the breakouts. Just remember to wait for the pattern to be completed (wait for a decisive close of the price either above or below the triangle).

### Measuring the Price Target

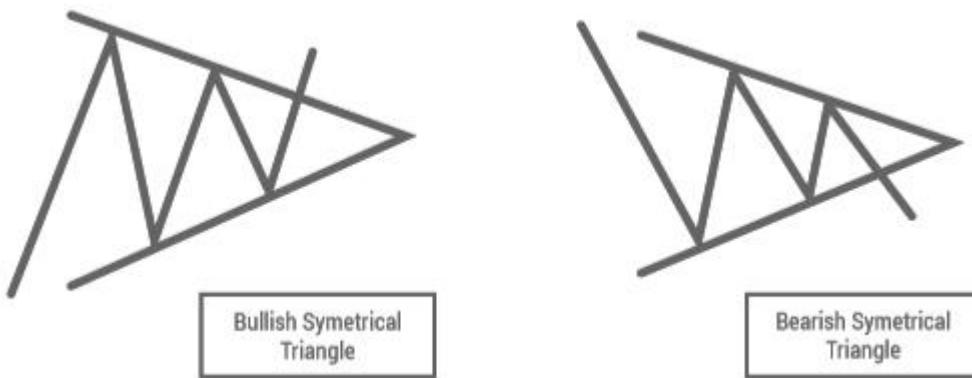
The general methods to calculate an approximate measure of the price target after the breakout is to measure the widest distance of the triangle and then apply this distance to the breakout point and project it in the direction of the breakout.



### Symmetrical Triangle

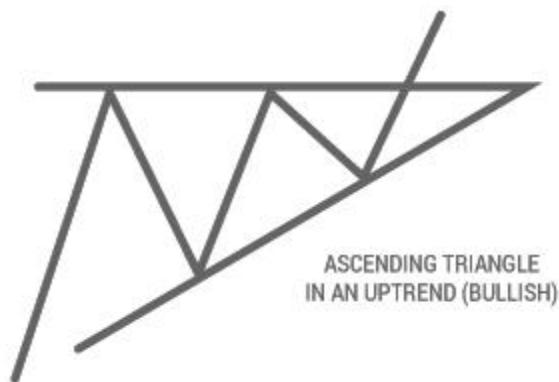
In the symmetrical triangle formation, prices consolidate in such a way that the slope (trendline) connecting the highs and the slope (trendline) connecting the lows converge together to look like a triangle.

If the prior trend was down, then prices will eventually break out of the triangle and continue the down trend. If there was an uptrend before the triangle formation, then prices will eventually break out to continue higher.



### Ascending Triangle

In the ascending triangle formation, the upper trend line is flat, while the lower line is rising. This occurs because buyers are more aggressive than sellers. It is therefore a bullish continuation pattern which is completed when prices breakout to the upside.

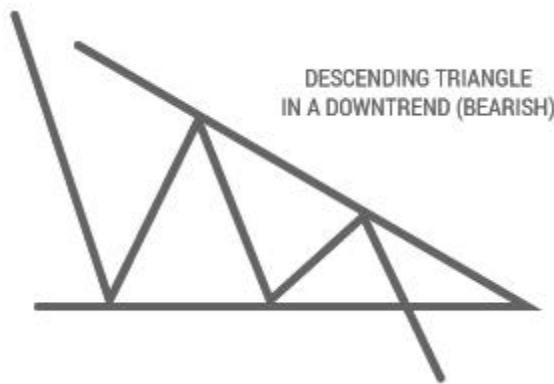


It is important that the price closes above the flat upper line in order for the pattern to be complete and to be called an ascending triangle. We can see this in the chart below. Prices then resume the uptrend.



### Descending Triangle

The descending triangle is basically a mirror image of the ascending triangle. In this case, the upper trend line has a downward slope while the lower line is just horizontal. This occurs because the sellers are more aggressive than buyers. Therefore, it is a bearish continuation pattern which is completed when prices breakout to the downside.



It is essential for you to know that the price closes below the flat lower line in order for the pattern to be completed and to be called an ascending triangle. We can see this in the chart below. Prices then resume the downtrend.

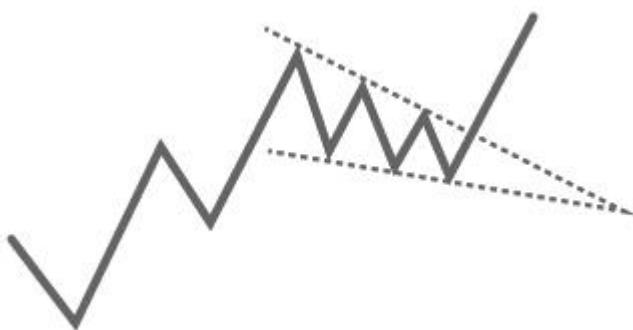


## Wedges

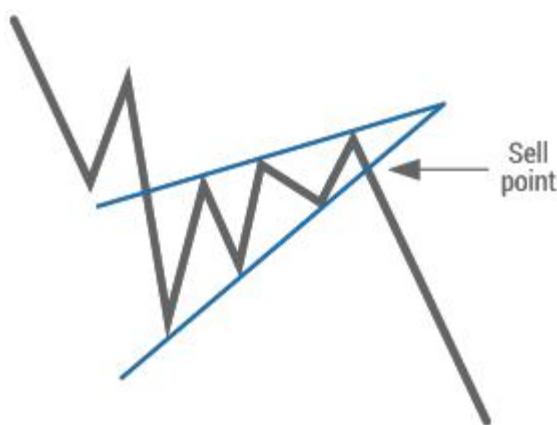
Wedges are another form of continuation pattern since they also signal a pause in the current trend. They are somewhat similar to triangles since they are identified by two converging trend lines.

The difference with triangles though is that wedges have a noticeable slant against the prevailing trend. Triangles usually have a more

horizontal direction. As a continuation pattern, a falling wedge in an uptrend is considered bullish. A rising wedge in a downtrend is bearish.



A rising wedge is bearish.



### Measuring the Price Target

The measuring technique for the price target for wedges is similar to that for triangles. Simply measure the widest distance inside the wedge and project that same distance from the breakout point.

### Pennants and Flags

Pennants and flags are another form of continuation pattern but are usually brief in duration in comparison to triangles and wedges. It usually takes less than a month for the pattern to be completed.

### Pennant

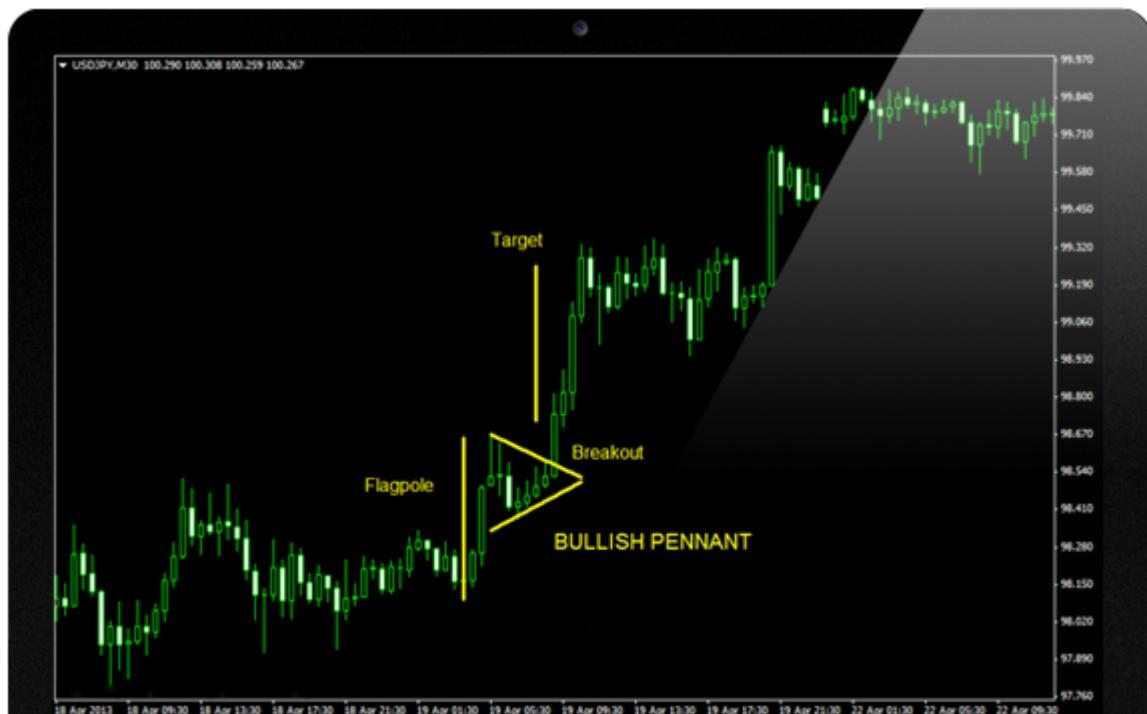
A pennant is usually preceded by a strong move in prices, almost in a straight line, to resemble a flag pole or mast.

Usually, pennants are said to be flying at half-mast. This is because pennants usually appear at about the halfway point of the whole move. So the distance of the initial price move is approximately the same as the proceeding price move after the breakout. Often we can use the height of this flagpole (i.e. the initial move) to estimate the size of the breakout move.

We distinguish bullish and bearish pennants.

The bullish pennant signals a bullish price move. Therefore, after a sharp rally, a bullish pennant forms as prices take a breather before running off again in the same upward direction. You can see the strength in the uptrend slows down as the pattern forms but then prices breakout and resume stronger upward momentum.

Looking at the chart below, we can see that after a quick rally, there is a pause and then a blast higher.



## Trading

You could have entered a buy position slightly above the breakout point. For your price target, calculate the distance of the initial price move up (flagpole) and project it upwards from the breakout point.

The bearish pennant signifies a bullish price move. Therefore, after a big fall, the bearish pennant provides a temporary pause in the downtrend for prices to consolidate and sellers to take profits. Prices soon breakout of the pennant and continue downward. In the chart below we can see a bearish pennant.



You could have entered a sell position just below the breakout point and with a price target of equal distance to the mast (initial down move).

## Flags

Flags are similar to channels. This continuation pattern consists of two parallel lines, acting as support and resistance. The slope of the lines can be either positive, negative or zero. This depends on the prevailing trend.

- x If the trend is up, the flag will point down and have a negative slope.

- x If the trend is down, the flag will point up, and have a positive slope.

The flag can sometimes just be sideways, and this is usually called a rectangle. Therefore, we could say that generally in a flag formation, the price will trend in a modest reversal, confined within the flag's top and bottom trend lines, before breaking out in the same direction of the larger move that preceded the flag.

### Trading

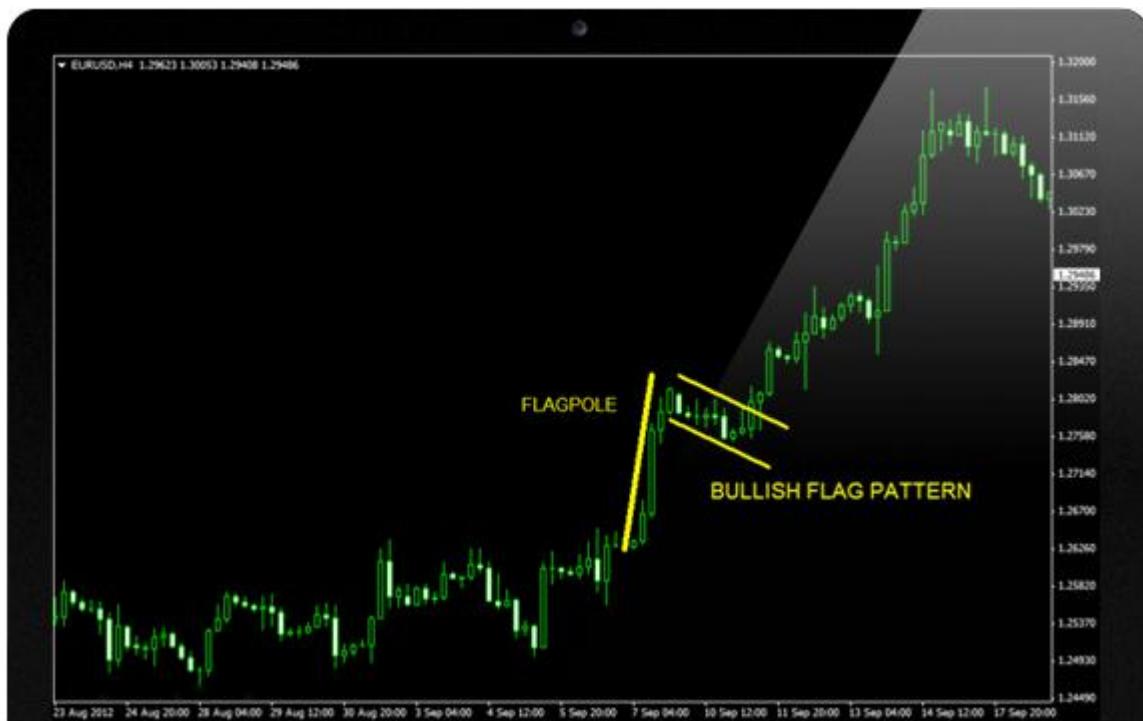
Assuming we are in an uptrend, a buy signal would occur when the price breaks out and closes above the resistance line (upper line) of the flag.

If we are in a downtrend, a sell signal would occur when price penetrates and closes below the support line (lower line) of the flag.

Below is an example of a bearish flag. You can notice how the price fell going into the flag and penetrated the upper flag line (resistance line). Also, the price fell going out of the bottom line (support line) of the flag. Therefore, this is a bearish sign that the price will fall upon breaking out of the bottom of the flag formation.



Below we have a chart with a bullish flag pattern.



## Rectangles

A rectangle is another type of continuation pattern. Just like the name implies, it takes the form of two parallel lines where prices are consolidating into a trading range. Therefore, this shows that the market is taking a pause from the previous trend and will likely continue in the same direction of the trend once the price breaks out of the rectangle.

This rectangle formation is usually preceded by a flagpole, which can be used as a measuring target of when price will break out from the rectangle.

Below is an example of a continuation pattern in the form of a rectangle. Prices were in an uptrend before consolidating into a rectangle. The price soon broke out above the upper parallel line of the rectangle to resume the uptrend.



## Trading

In the example above we have USDCHF in a downtrend. You could have entered just below the breakout point of the lower rectangle line and aimed for a price target that is the length of the flagpole (which is the initial price move down).

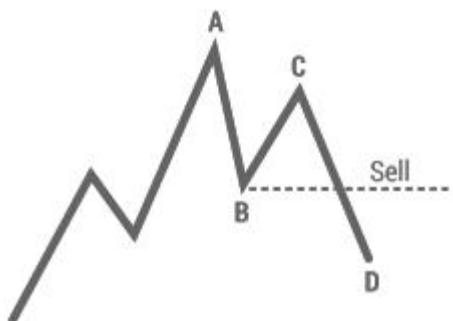
## Swing Trading

The failure swing pattern is a type of reversal pattern that can be used as buy or sell signals. In an uptrend, we see a series of successive higher highs and higher lows but there comes a point when the price fails to make a new high.

In a downtrend, prices fail to make a new low. This will make us aware that there could be a change in pattern.

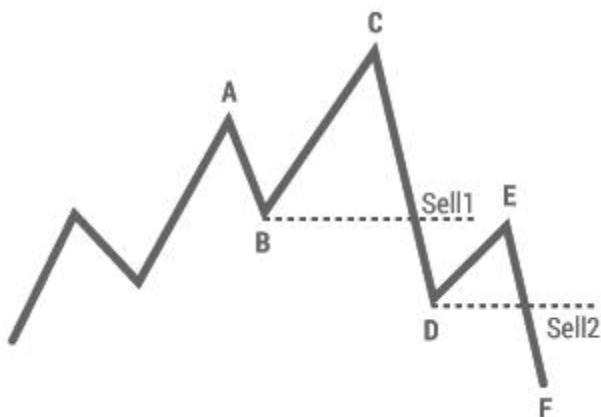
### Failure Swing Top

In the diagram below we have a failure swing top:



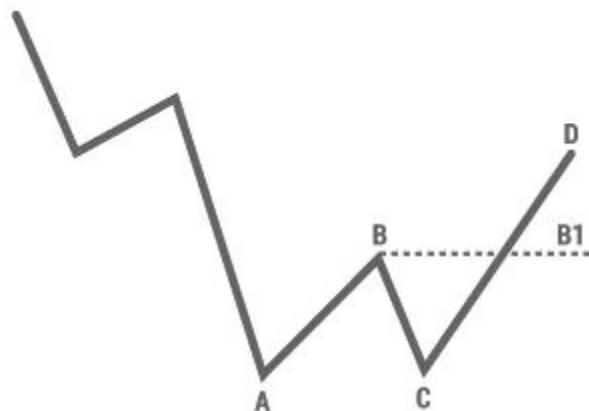
We draw a trigger line at the first trough (B) created after the highest peak (A). If the prices continues to break below this line where the previous low is (B), we have a completed failure swing downwards. The sell signal occurs at this break of this swing level.

#### Non-failure Swing



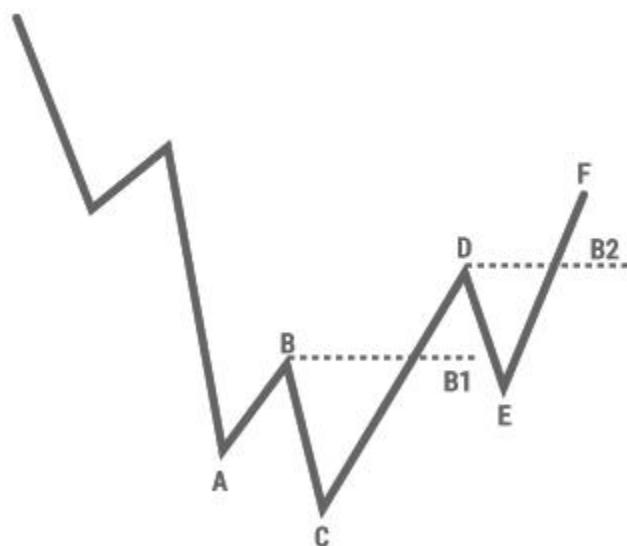
Here we have a case of a non-failure swing. Prices rally to a new high, peaking at point C. Prices then fall below the previous low of point B down to point D. The first sell signal is the violation of this previous low B. If you prefer you could wait for a failure swing confirmation when prices violate the previous low, point D.

#### Failure Swing Bottom



In this scenario, prices are in a downtrend to point A. Then prices fail to make a new low, making a slightly higher low at point C and moving higher by violating point B. We have a failure swing completed upwards. A buy signal occurs at point B1.

#### Non-failure Swing Bottom



In this scenario, a buy signal is given at point B1 and at point B2.

#### Moving Averages

The moving average is one of the most popular indicators used in chart analysis and its main purpose is to identify the direction of a trend and also define potential support and resistance levels.

In the chart below we can see the moving average shows price direction is down and acts as resistance to prices in this downtrend.



The moving average is considered to be a lagging indicator. It does not predict price direction, but rather defines the current trend with a lag.

The moving average indicator filters out noise by smoothing out price and volume fluctuations that can confuse interpretation and it therefore makes it easier to view the underlying trend. It appears as a line on a chart close to price action and it shows the average value of a security's price over a set period of time. For example, to calculate a 21-day moving average, the closing prices of the last 21 days are added up and the total is divided by 21.

We perform the same calculation with each new trading day forward. Each time, only the prices of the last 21 days are used in the calculation. This is why it is called a moving average.

The example we have just explained refers to the simple moving average (SMA). There are other types of moving average as well, such as the exponential and the weighted moving averages.

### How to Calculate?

The problem with the simple moving average is that only the period covered by the average is considered and each day is given equal weight. So in a 21 day moving average, the 1st day carries equal weight to the 21st day. This is the main criticism of the simple moving average and some believe that more weight should be given to the more recent price action. To overcome this issue, the weighted moving average (WMA) can be used. The weighted moving average assigns more weight to recent prices and less weight to older prices.

For example, to calculate a 5 day WMA, we should take the closing price of the 5th day and multiply this by 5, the 4th day by 4, the 3rd day by 3, the 2nd day by 2 and the 1st day by 1. Once the total has been determined, we then divide the number by the addition of the multipliers. If you add the multipliers of the 5 day WMA example, the number is 15.

However, the weighted moving average takes into account the prices covered by the period of the moving average and not all the data in the life of the security. In order to solve this problem, the exponential moving average (EMA) can be used.

This moving average assigns more weight on the recent prices and also includes all the price action in the history of the security. The advantage of this is that the exponential moving average is more sensitive and moves closer to the price action while at the same time takes into account its calculation of all the data in life of the security.

Looking at the diagram, we can see how the EMA reacts quicker to a change in the trend compared to the slower SMA.



### Length of the Moving Average

What is the correct length of a moving average? The critical element in a moving average is the number of time periods used in calculating the average. The length of a moving average should fit the market cycle you wish to follow.

TREND

MOVING AVERAGE LENGTH

Short Term                            5-14 periods

Medium Term                        20-30

Long Term                            50-100

TREND	MOVING AVERAGE LENGTH
Very Long Term	200

Do not use in a range! Moving averages work better when the market is trending. In a range this indicator is not of much use and buy or sell signals will not work effectively.

### How to Trade with the Moving Average?

The moving average is usually plotted on the same chart as price action. Therefore, a change in the direction of the trend can be indicated by the penetration of the moving average.

For example, a buy signal is generated when a price breaks above the moving average and a sell signal is generated by a price break below the moving average. It is added confirmation when the moving average line turns in the direction of the price trend.

We can use moving averages to identify buy and sell opportunities. There are various techniques used. One is a simple technique using just one moving average. Other techniques use more than one moving average. The double crossover method, uses two moving averages, while the triple crossover method uses three moving averages. The advantage of using more than one moving average is that fewer whipsaws are produced.

### Simple Technique

In the chart below you can see that prices are in a downtrend. The best trading opportunity would be when prices are also below the moving average since this would confirm a strong downtrend. We would sell when price bounces off or crosses from above to close below the moving average.



Note that the longer the period you use for the SMA, the slower it is to react to the price movement. This would create fewer whipsaws and false signals. To make a moving average smoother, you would average closing prices over a longer time period. A shorter period moving average hugs prices more closely and is more sensitive to price action.

The longer term averages work better as long as the trend remains in force. Therefore it can be more advantageous to use more than one moving average.

Displaying two or three moving averages on a single chart provides important signals based on the moving average trends and crossovers.

#### Buy and Sell Signals are Given

- ✗ when the price crosses the moving average
- ✗ when the moving average itself changes direction
- ✗ when the moving averages cross each other

## The Double Crossover Technique

In the double crossover method, we use two moving averages, one short and one longer period than the other, for example, SMA-50 and SMA-200. A buy signal occurs when the SMA-50 crosses the SMA-200 from below to move higher. A sell signal occurs when the SMA-50 crosses below the SMA-200.



## The Triple Crossover Method

The best performance is achieved when a shorter term average is rising above a medium-term average and both are rising above a long-term moving average. This is called the triple crossover technique.

For example the 10-25-50 day moving averages can be used. Also another commonly used triple crossover system used is the 4-9-18 day moving average system. The alignment of the moving averages in an uptrend is as follows: the shorter term MA (e.g. 10 day) follows prices closely, while the 25 day follows below it, and then the 50 day is below these two.

In a downtrend, the order is reversed, so that the 10 day MA is the lowest, then the 25 day above it, followed by the 50 day on the top. When prices are in a downtrend and subsequently reverses to the upside, a buy alert occurs when the shorter-term moving average, the 10 day crosses above the 25 day and the 50 day.

The buy signal is confirmed only after the 25 day crosses above the 50 day. Therefore, the order of the moving averages is reversed. When the uptrend is reversing to the downside, a sell alert is given when the 10 day dips below the 25 day and then the 50 day. A sell signal is confirmed when the 25 day crosses below the 50 day.



## Fibonacci

### A Brief Overview

Back in the early 1200's, an Italian mathematician by the name of Leonardo of Pisa, also commonly known as simply Fibonacci, became famous for spreading the Hindu-Arabic numerical system throughout Europe and the rest of the world. He did this by publishing a book in 1202 entitled *Liber Abaci*, in which he explained a certain number sequence, called the Fibonacci sequence.

This Fibonacci number sequence begins with 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, and so on until infinity.

Fibonacci explained how this series of numbers created ratios, which describe the natural proportions of many things in the universe. Today we use these Fibonacci numbers in the analysis of computer algorithms, biological systems and very often in analyzing financial markets. They form one of the main pillars of technical analysis.

## Ratios

After the first few numbers in the sequence, the ratio between one number and the succeeding numbers will be 0.618. For example, 34 divided by 55 equals 0.618. Or 144 divided by 233 equals 0.618...and so on. Also, if we measure the ratio between alternate numbers we will get 0.382.

For example, 34 divided by 89 equals 0.382. And 144 divided by 377 equals 0.382.

What you need to know is that there are different ratios we can calculate from the Fibonacci number sequence and they care called the golden ratio. And the reason these ratios are important for us in technical analysis is that they give us the important Fibonacci retracement levels and extension levels.

## Fibonacci Retracement Levels

0.236, 0.382, 0.618

These Fibonacci retracement levels can also be seen as a percentage instead of a ratio. Therefore, we have the most common retracement levels at 23.6 %, 38.2% and 61.8%. See the chart below.



### Extension Levels

1.618, 2.618, 4.236

The Fibonacci extension levels would be 161.8%, 261.8% and 423.6%.

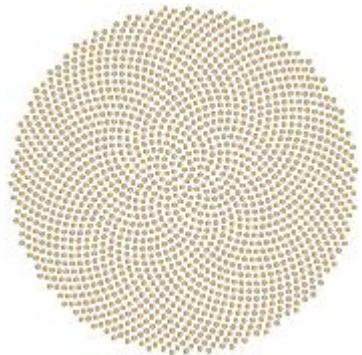


## The Golden Ratio

The ratio we derived from the Fibonacci sequence, which is 1.618 or its inverse, 0.618, is known as the golden ratio. It is also sometimes called Phi, which is the Greek letter  $\Phi$ .

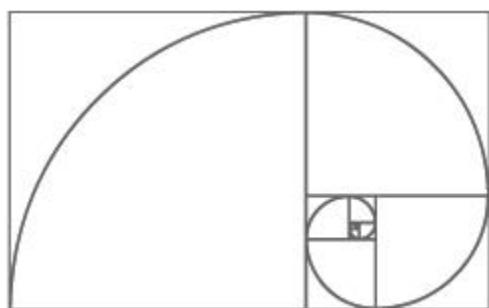
Almost everything in nature has dimensional properties that adhere to phi; the ratio of 1.618. This ratio can be seen in relationships between different components throughout nature and seems to have a fundamental function for the building blocks of nature.

For example, let's look at sunflowers which form a golden spiral. If we apply the Golden Ratio to a circle we can see how it is that this plant exhibits Fibonacci qualities.

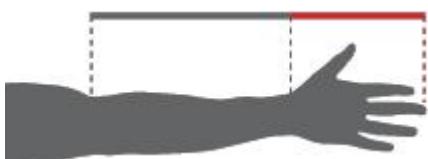


Sunflowers have opposing spirals of seeds, which amazingly have a ratio of 1.618 between the diameters of each rotation!

This is because the individual florets of the sunflower in the center grow in two spirals extending out from the centre in opposite directions. So if the first spiral has 21 arms, while the other has 34, these are Fibonacci numbers, and have the golden ratio.

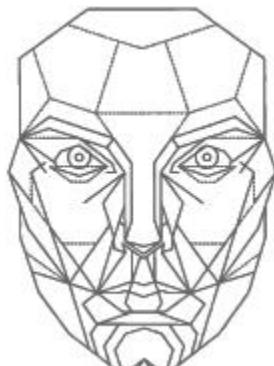


The golden spiral is also evident in shells.



We can also find the golden ratio in the human body. Obviously, everyone is different, but in a perfect human body as defined by scientists this ratio is present.

The ratio between the forearm and the hand gives us the golden ratio!



On the human face we can see various golden ratios, as well. For example:

- x Length of face / width of face
  - x Length of mouth / width of nose
  - x Width of nose / distance between nostrils
  - x Distance between pupils of eyes / distance between eyebrows
- Fibonacci Retracements

Fibonacci retracements are a common tool used in trading. They show us by how much a market movement has the potential to retrace or pull back. As we saw previously, the market does not move in a straight line but in a zigzag pattern, creating consecutive peaks and troughs. Then from these tops and bottoms we can derive our support and resistance levels.

Fibonacci retracement levels can help us find these potential support and resistance levels. From these, we can identify potential buy and sell entry points.

The Fibonacci retraction is created by taking two extreme points, which are usually the highest peak and the lowest trough on the chart. We call them the All Time High (ATH) and the All Time Low (ATL). Most trading platforms usually automatically calculate the retraction levels.

The resulting numbers come from dividing the vertical distance between the ATH and ATL by the key Fibonacci ratios of 23.6%, 38.2% and 61.8%. Once these levels are found, horizontal lines are drawn and used to identify possible support and resistance levels.

### Finding Retracement Levels in an Uptrend

Below is an example of GBPUSD in an uptrend on a daily chart.



By using the Fibonacci tool on the chart, from the All Time Low (ATL) to the All Time High (ATH) we obtain the retracement levels. As can be seen, the main Fibonacci retracement levels are as follows:

#### FIBONACCI RETRACEMENT

23.6%

#### PRICE LEVEL

1.5482

FIBONACCI RETRACEMENT	PRICE LEVEL
38.2%	1.5288
61.8%	1.4975

Based on these retracement levels, there is potential in the days ahead for GBPUSD to retrace (pullback) from the recent peak to dip to one of these Fibonacci levels. We expect prices to find support at one of these levels and it will give us an opportunity to enter the market and place a buy order.

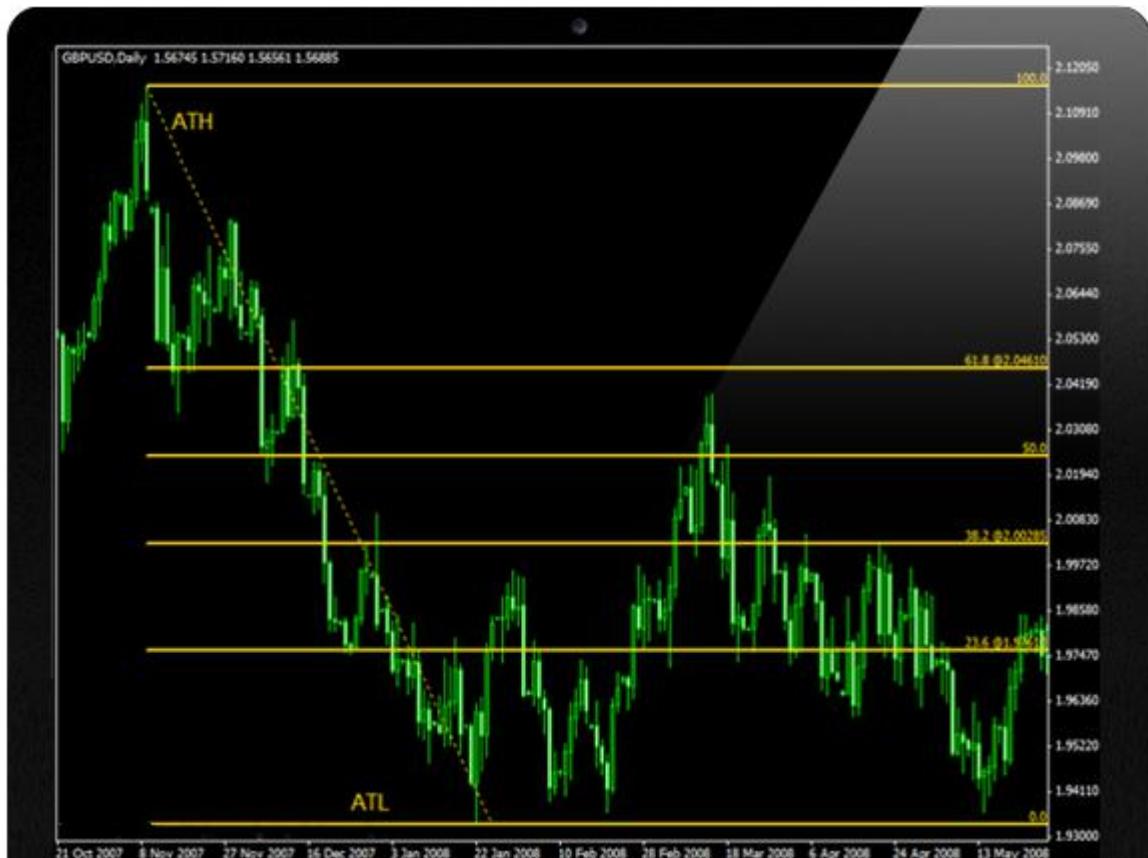
After observing our GBPUSD daily chart for a few days, we can see that prices did in fact retrace from the all time high.

We can see that the price dipped to the 38.2% Fibonacci retracement level and then held at the 23.6% level. Strong support was found at this level and prices were unable to close below it, resulting in a bounce. The market resumed the prior uptrend. Here we had a good opportunity to enter the market at the 23.6% level and enter a buy position.



### Finding Retracement Levels in a Downtrend

Let us look at a chart for the GBPUSD in a daily time frame in a downtrend.



By using the Fibonacci tool on the chart, from the All Time High to the All Time Low (ATL) we obtain the retracement levels. As can be seen, the main Fibonacci retracement levels are as follows:

FIBONACCI RETRACEMENT	PRICE LEVEL
23.6%	1.9761
38.2%	2.0028
61.8%	2.0461

Based on these retracement levels, there is potential for GBPUSD to retrace from the recent trough (ATL) to bounce to one of these Fibonacci levels. We expect prices to find resistance at one of these levels and it will give us an

opportunity to enter the market and place a sell order since we expect the downtrend to resume later. After waiting a few hours, we can observe what happened next.

What we can see is that after touching the all time low, prices began to rally all the way up to near the 61.82% Fibonacci retracement level where they stalled just below that level before resuming the downtrend. We had a good opportunity to enter the market at the 38.2% level with a sell order.



## Summary

We have seen in the two examples above, how Fibonacci retracement levels can give us good opportunities to enter the market. We observed that prices retraced at certain Fibonacci retracement levels, which provided some temporary support or resistance so that we could place new orders. Of course we have to be realistic and be careful because Fibonacci levels do not always hold and what we thought was a retracement could end up being a trend reversal.

## Fibonacci Extensions

Fibonacci extensions are used by many traders to determine target levels where they wish to take profit. These extensions consist of all levels drawn beyond the standard Fibonacci levels (below the 100% level), with the most common extension levels being 161.8%, 261.8% and 423.6%. Fibonacci extensions are a good way of finding out what price move is expected after a swing high or swing low is crossed.

### Using Fibonacci Extensions in an Uptrend

When the market is in an uptrend, we look for a swing high followed by a retracement. Then we use the Fibonacci tool on our chart from the swing low of the retracement to the swing high. Notice how this Fibonacci is drawn in a different way from when we used it in finding retracement levels. The Fibonacci extension is drawn opposite to the trend.

By doing so, we get the Fibonacci extension levels we want, which are the 161.8%, 261.8% and 423.6%. We expect that prices will likely find resistance at these levels if they continue heading higher from the retracement.

In the chart below we can see that GBPUSD is in an uptrend. Prices retraced and dipped to the 38.2% Fibonacci retracement level.



We can see that this 38.2% Fibonacci level was upheld and prices found strong support at this level before bouncing back up to resume the uptrend. Prices eventually rose above the previous swing high (the ATH we used when plotting the Fibonacci retracement levels).

Here the uptrend held in tact and there was a good opportunity to take profit. We would have bought on the dip (just above the 38.2% Fibonacci level). Then we used the Fibonacci extension in order to calculate the target (profit) levels.

In the chart below we can see that the 161.8% Fibonacci extension level was reached which was our intended profit target. This would have been a good place to take some profit.



Important! You do not have to close the whole position at one level. For example, you can just take profit on half of your long position at 161.8% and then the rest at a higher target, such as 261.8% if it is reached.

### Some Drawbacks

You must be realistic and know that there is no way of knowing exactly which Fibonacci extension level will provide resistance. Any of these levels may or may not act as support or resistance. However, more often than not, there will be some price reaction at these key Fibonacci extensions.

The only reason price seems to reverse around these key levels is because so many other traders are also using the same Fibonacci retracement levels on their charts. So as a result it kind of becomes a self-fulfilling prophecy because these

same traders will be placing trades around these key levels at the same time, forcing the price to react as predicted.

It is best to use Fibonacci extensions as a “guide line”.

## Japanese Candlesticks

Previously we discussed about different chart types and mentioned the candlestick chart. We will now discuss this chart in more detail to see how we can use candlestick patterns to help us trade better.

### History of Japanese Candlestick Patterns

Candlestick analysis was first created by the Japanese many centuries ago, as early as the 1700's and used by rice traders. It was only recently, in the last 30 years or so, that candlestick patterns began to first make their way into the Western world.

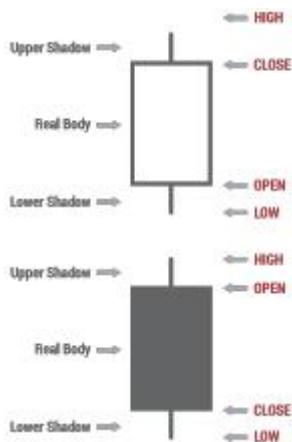
An American by the name of Steve Nison did extensive research in to candlestick signal analysis and published a book in 1991 entitled Japanese Candlestick Charting Techniques. His initial publication gave rise to increased interest in this type of technical analysis.

Candlestick pattern analysis involves identifying certain combinations of candlesticks or a single candlestick pattern that would help a trader determine a reversal or continuation in the trend.

### Candlestick Formation

Candlestick charts provide more information compared to bar charts and line charts. Candles provide better visual information that makes reading price

action easier and allow us to get a better idea about market sentiment and any impending changes to it.

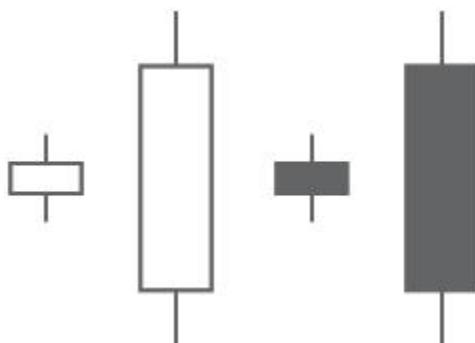


Candles show the high and low, as well as the relationship between the open price and the close price.

The colour of the candle shows whether the session closed above the open price or below the open price.

In this example, white is for up and black is for down. Candlesticks can be used for any time frame, whether it be one week, one day, one hour, or 15 minutes.

### Size of Body and Shadow



Candlesticks have different body sizes. Long bodies indicate strong buying or selling pressure, while short bodies imply very little buying or selling activity.

## Common Candlestick Patterns

There are over 40 candlestick formations. We will examine the most common ones.



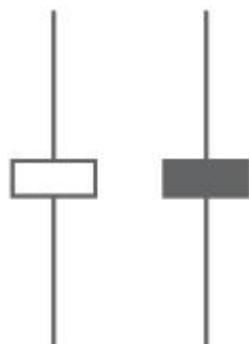
Doji candlesticks have the same open and close price. They suggest indecision or struggle between buyers and sellers.



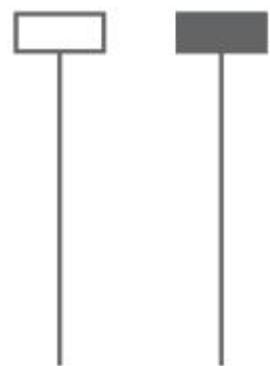
The Gravestone Doji has long upper shadow and no lower shadow. The open and close prices are both at the low end of the time period. It has a bearish connotation as it usually suggests a bullish rally is near an end and signals a reversal.



The Long legged Doji has a very long shadow and reflects indecision on the part of market participants. It signals an impending reversal of price direction.



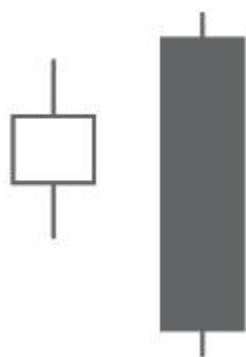
Spinning Tops indicate indecision between buyers and sellers.



The Hammer has a small body near the high and has long lower shadows. The color is not as important. When found in a downtrend, usually it signifies bullish sentiment.



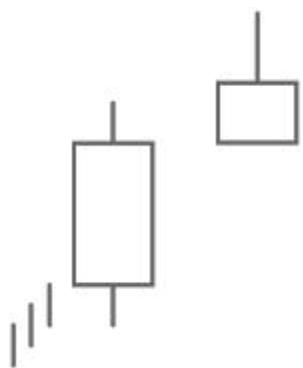
The Bullish Engulfing Pattern, when formed at the end of a downtrend, signifies bullish sentiment. This complete engulfing of the previous candle represents overwhelming buying pressure fading selling pressure.



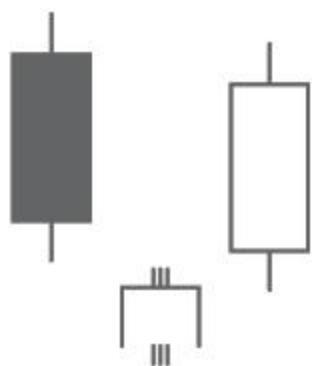
The Bearish Engulfing Pattern is the opposite of the bullish engulfing pattern and signifies bearish sentiment. Sellers are beginning to overwhelm buyers.



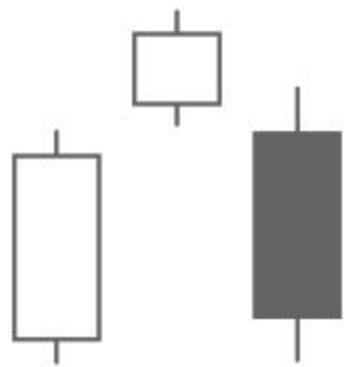
The Piercing Pattern, when found in a downtrend, signifies an impending reversal to the upside.



The Shooting Star, when in an uptrend, indicates an impending reversal to the downside.



The Morning Star, when in a downtrend, signifies a bullish reversal. Prices start to rise.



The Evening Star is the opposite of a Morning Star. In an uptrend it signifies bearish reversal. Prices start to fall.

## Principles of Momentum Indicators

So far you have seen how well some indicators, such as moving averages, work in trending markets.

However, these indicators are not useful in trading ranges. What you could use instead are oscillators. These are said to be leading indicators, as opposed to lagging indicators, which is what moving averages are, as they tend to lag the trend.

Oscillators lead price action and can give warning of an impending change in price direction, especially when there is a divergence. We will look at divergence later.

Unlike moving averages, which are plotted on the charts, oscillators are plotted below the price chart.



Most oscillators look alike and are interpreted in a similar way. Oscillator indicators are bound within a range, usually between zero and 100. This range is divided into upper and lower halves by a mid-point line (which is sometimes zero, depending on the formula used to construct the oscillator).

Remember that oscillators are secondary indicators and should not be used exclusively but should be supported by using other indicators as well. You should always look at prices on the chart first, and whether the overall trend supports the idea.

### Uses of Oscillators

#### Loss of Momentum

Oscillators can be used to indicate loss of momentum in the price move (trend).

#### Determining Extremes

Oscillators are a good tool for determining overbought or oversold conditions and give us a warning that the price trend is overextended and vulnerable. An oscillator will fluctuate between these two extremes of overbought and oversold.

Why so? Because markets are essentially driven by psychological forces and investors' emotions change from greed to fear, to hope, and to despair. This is what causes momentum indicators to oscillate from overbought to oversold conditions.

We can say that the market is overbought when the oscillator is at an extreme in the upper half of the range. Oversold is when the oscillator is in the lower extreme.

#### Divergence

We can use oscillators to spot any divergence from price direction. This is an important warning that the price trend could change. Divergence only applies

when the market is overextended (overbought or oversold). When in an extreme position, and the oscillator is in the opposite direction from price direction, this is called divergence.

In the chart below we can see that even though prices are still rising, the oscillator here (RSI) is beginning to decline, causing a bearish (negative) divergence. This gives a warning that the trend could turn down.



When the oscillator starts to turn back up while the prices are still declining, this is bullish (positive) divergence.



### Crossing the Mid-point (or Zero) Line

Another use of the oscillator is when it crosses the middle line (or zero line) which separates the upper and lower half of the range, and to use it as a buy or sell signal.

Look at the chart below at the first red line. We sell when the oscillator crosses below the mid-point and prices are in a downtrend. On the other hand, buy when the oscillator crosses the mid-point from below and moves above while prices are in an existing uptrend.



## Summary

An oscillator cannot just by itself be used to make a decision to enter a trade. It is a secondary indicator. Price always rules and the underlying trend is more important.

Look for overextended conditions, as this is usually where the oscillator is most useful. Consequently, especially look for divergence in extreme conditions – for example, prices going up and making new highs but oscillator turning down. Then also look for a mid-point or zero line crossing, as it may be a signal to buy or sell. Buy when above the line and sell when below.

## Individual Momentum Indicators

So far you have seen that momentum measures the velocity of a price movement. It is a generic term. Just as the word fruit encompasses oranges,

bananas, apples or pears. momentum embraces a host of individual indicators such as rate of change, RSI, MACD and stochastics.

Although the principles of interpretation apply to all of them, each indicator has different attributes. You shall learn later, for instance, that RSI lends itself to trend line construction. So does the stochastics, but that is not how it is normally interpreted.

Now we will move on to examine the following momentum indicators separately:

- x Relative Strength Index (RSI)
- x Moving Average Convergence Divergence (MACD)
- x Momentum (Price ROC)
- x Stochastics
- x Commodity Channel Index (CCI)

### Relative Strength Index (RSI)

The Relative Strength Index, or RSI, was created by Welles Wilder, and its main purpose is to identify extreme conditions in the market. By showing if the market is in oversold or overbought territory, we can make better trading decisions.

The RSI is an oscillator that is scaled from 0 to 100, with readings below 30 indicating oversold, while readings over 70 indicate overbought territory.



## Using the RSI in Trading

The RSI can be used to identify extremes, to confirm a trend and also to identify divergence. We will look at each of these principles in detail.

### 1. To Identify Extremes

One main use of the RSI is to identify market extremes.

#### Oversold Territory

If the RSI is below 30, this is the oversold territory. Selling pressure is high and a technical correction is likely. Prices are forming a bottom since there are no more sellers and therefore buyers begin to come into the market. Prices eventually head back up.

If the RSI indicator turns up as well, then this is a good opportunity to buy.

Remember that just because the RSI falls below 30, it does not mean it is a signal for immediate buying because the RSI may stay in the oversold territory

for a long time. In order to enter at the right moment (on true market reversal) you should wait for the RSI to leave the oversold territory.

Look at the chart below. When the RSI goes below 30, you would be on the lookout for an opportunity to buy, however your actual trade will take place only when the RSI crosses up above 30.



**Overbought Territory**  
If the RSI is above 70, this is overbought territory. Buying pressure is high, and prices will form a top. Fewer buyers remain in the market and sellers begin to come in. A correction is likely, turning prices back down. If the RSI turns down as well, this is a good opportunity to sell.

**Note Before Trading:** Once the RSI goes above 70, you should wait for the indicator to come out of the overbought area and cross below 70 before placing your sell order. Look at the chart below.



## 2. To Confirm a Trend

The RSI indicator can be used to confirm the trend of the market. One way to do this is to draw trend lines on the RSI indicator. If the RSI's trend line stays intact, it confirms that a trend holds well. RSI trend lines are especially useful on larger time frames. Look at the chart below.



With the RSI trend lines you are able to receive a much earlier warning about upcoming trend changes since RSI trend lines will often warn of a breakout a few candles earlier than chart trend lines. Some technical analysts like to use the 50 level of the RSI for additional confirmation of a trend. If we see prices are in an uptrend on the chart, we can confirm this trend by looking at the RSI. If the RSI crosses above the 50 level from below, the uptrend is confirmed. On the other hand, if prices are in a downtrend on the chart and the RSI breaks below the 50 mark from above, we can confirm the downtrend. Referring to the chart below, we insert a 50 line in the RSI indicator section (see the red line).



### 3) To Identify Divergence

Another way to use the RSI indicator to help us trade better is to identify RSI divergence signals. What is divergence? Sometimes the RSI indicator will not move in the same direction as the market. This is what is called divergence. It is useful for informing us of an impending trend reversal and giving us the opportunity to enter a trade. We can identify bullish and bearish divergence.

Bullish divergence occurs when the market is in a downtrend and prices are making a new low but the RSI does not continue lower and instead begins to climb back up. This is a bullish signal indicating that the trend is about to change direction to an uptrend. This gives us the opportunity to buy.



Bearish divergence occurs when the market is in an uptrend and prices are making new highs but the RSI does not continue higher. Instead the RSI turns down. This is a bearish signal indicating that the trend is about to change direction and become a downtrend. This gives us the opportunity to sell.



## Useful Hints

When the RSI approaches 30 from below watch for a bullish divergence => slowly rising RSI versus already declining prices. When the RSI approaches 70 from above you should look for a bearish divergence, which occurs when actual RSI readings begin to decline while prices are still climbing.

## Summary

Divergence suggests that a current momentum is over. Therefore you should protect any current profits and be ready to trade in the opposite direction.

## Moving Average Convergence Divergence (MACD)

### About the MACD

The MACD is a popular oscillator used in technical analysis to identify trends and it stands for Moving Average Convergence Divergence.

The MACD technique uses two exponential moving averages and its main purpose is to provide a smooth trend indicator. It is constructed by subtracting a 26-period exponential moving average (EMA) of the closing price from a 12-period EMA of the closing price:

$$\text{MACD} = \text{EMA}(12) - \text{EMA}(26)$$

Therefore, this difference between the two EMAs is plotted as a line on a chart, called the MACD line.

A second line called the signal line is then plotted and is basically a 9 period simple moving average of the MACD line. This is a slower line and basically smoothens out the faster MACD line, making it more accurate. The two MACD lines can be turned into a histogram which looks like vertical bars. This histogram can then be constructed by calculating the difference between the MACD and the signal line.

If you look at the chart below, you can see that as the two moving averages separate, the histogram gets bigger. This is called divergence. On the other hand, as the histogram bars get closer, this means the moving averages get closer to each other, meaning they are converging and creating convergence.

name Moving Average Convergence Divergence!



## Using the MACD in Trading

The MACD is best used when there is a trend and it can give you buy and sell signals. The MACD indicator fluctuates over a zero line. It is the crossing of this line that generates buy and sell signals.

Note how the histogram crosses over above or below the zero line coinciding with the crossings of the MACD line and its signal. The histogram can be used to identify the strength of the trend.

### Bullish Market

When the MACD line is above zero, it means 12EMA is above 26EMA, and we can say the market is bullish. Buy signals are more profitable in an uptrend. Referring to the diagram, we can enter a buy position when the green line (MACD) crosses its signal (red line) from below and we can see that the trend is up.



### Bearish Market

Sell signals of the MACD work best when the market is in a downtrend. When the MACD line is below zero, the 12 EMA is below 26EMA, we can say the market is considered bearish. We can enter a sell position when MACD crosses below its signal line from above and prices are moving down.

In the chart below, this happens when the MACD line (green line) crosses its signal line (red line) from above to move below it.



### Trading with the MACD Histogram

The histogram can be used to identify the strength of the trend. When the histogram is above the zero line but is falling towards the zero line, we can say the uptrend is weakening and prices are beginning to fall.



Also, when the MACD line is too far above the zero line we have an overbought condition. Likewise, when MACD is too far below the zero line, this suggests an oversold condition. Always determine the direction of the trend before entering a position. The MACD will help you time your entry.

## Stochastics

### About the Stochastic

The stochastic is a momentum indicator that helps us identify a change in price direction and can also give us entry signals to buy or sell. This oscillator basically follows the speed or momentum of price and shows overbought and oversold conditions in the market.

The stochastic indicator actually consists of two lines. The first line (often called %K) is the stochastic itself and the second line (called %D) is basically the moving average of the stochastic (the %K line). Don't forget that on the MT4 trading platform the main %K line is displayed as a solid line and the %D is a dotted line.

The stochastic indicator is plotted on a vertical scale between 0 and 100. A reading below 20 indicates an oversold condition whereas a reading above 80 indicates an overbought condition.



On the chart you can see that after the stochastic shows an oversold situation, prices go back up. After an overbought situation prices go back down.

### Trading with Stochastics

An overbought condition suggests the possibility of an upcoming pause in a market rally, as buying pressure runs out of steam. So there is a greater potential for a reversal in price direction. Awareness of this situation can help us time a good selling opportunity. Conversely, an oversold condition suggests the

possibility of an upcoming pause in a market decline as selling pressure runs out of steam and makes a reversal to the upside more likely. Awareness of this situation can help us time a good buying opportunity.

## Divergence

Bullish and bearish divergence signals between price action and the stochastic oscillator are also helpful signals when anticipating market pauses and changes in price direction. A bearish divergence forms when a price records a higher high, but the stochastic oscillator forms a lower high. This shows less upside price momentum that could eventually lead to a downturn in prices.

On the other hand, a bullish divergence forms when a price records a lower low, but the stochastic indicator forms a higher low. This shows less downside price momentum that could signal a reversal.

Below we have an example of bullish divergence. Prices are falling but the stochastic is rising. Consequently, prices soon halt the downtrend and rise back up.



## Other Common Indicators

### A Brief Overview

There are dozens of technical indicators and tools you can use to analyze the market. In this section you will get to know about the most popular ones.

We recommend you to study them all and choose those in which you have confidence and with which you feel intuitively comfortable. Following too many oscillators usually leads to confusion.

More specifically in this section you will learn about:

- ✗ Bollinger Band: A band which is plotted two standard deviations away from a simple moving average, developed by famous technical trader John Bollinger. It is one of the most popular technical analysis techniques.
- ✗ Parabolic SAR (Stop and Reverse): When trading on trending markets, it is equally important to identify when the trend ends. The parabolic SAR might be just what you need!
- ✗ Pivot Points: They can be used to quickly determine market sentiment as well as to locate support and resistance levels.
- ✗ Ichimoku Kinko Hyo: The aim of this indicator is to provide you with a broad view of prices with just a single glance.
- ✗ Average True Range Indicator (ATR): It is used to measure market volatility and it will help you set your stop losses correctly.
- ✗ Average Directional Index (ADX): It is typically used to identify whether the market is ranging or starting a new trend.

## Bollinger Bands

The Bollinger band is a technical indicator used to measure market volatility and it gets its name from its developer, John Bollinger. Prices are banded with an upper and lower band plotted two standard deviations away from a simple moving average.

### Trading with the Bollinger Bands

There are two main ways to use Bollinger bands to help us in our trading.

#### Trading the Squeeze

The narrowing of the bands is called a squeeze and is often an early indication that the volatility is about to increase sharply. When the Bollinger bands squeeze together, it usually means that a breakout is about to happen.

Because standard deviation measures volatility, these bands will be wider during increased volatility and narrower during decreased volatility.

When prices break out of a squeeze, a new trend is formed, and prices either move to the upside or downside. Prior to the break out we do not know the direction of the price move but the squeeze in prices is a good notification of an impending break out.

If the candles start to break out above the top band, then the move will usually continue to go up. If the candles start to break out below the lower band, then the price will usually continue to the down side.

Looking at the chart below, you can see that after the bands get narrower during the squeeze, prices break out with greater volume and rally higher.



If prices break out above the upper band, a new uptrend may be developing. Wait for a candlestick signal and buy just above the breakout. You can enter a buy position after the first candle closes above the upper band.

If price breaks out below the lower band, a new downtrend may be developing. This is a good opportunity to sell just below the breakout point.

### Using Bollinger Bands as Support and Resistance Levels

Another way to use Bollinger bands is to use them as support and resistance levels and trade the bounce.

One thing you can notice about prices within the Bollinger band is that they tend to bounce off the upper and lower bands. The reason these bounces occur is because Bollinger bands act like dynamic support and resistance levels.

Using the bounce trading strategy is best when the market is ranging. The reason is because when the market is ranging, the price tends to return to the middle of the bands. The strategy is to buy when the price touches the lowerband and to sell when price touches the upper band.

Let us look at an example now.



You can see on the chart that prices tend to return to the middle of the bands. So when prices hit the upper band, they tend to bounce off this resistance level and fall back down towards the middle of the band. Likewise, when prices approach the lower band, they tend to bounce off this level, just like a support level, and head back to the middle of the band.

Therefore, a position to buy can be entered when prices bounce off the lower band and move upwards and a sell position can be entered when prices bounce off the upper band to fall back down. This is the whole idea behind the Bollinger bounce.

### Parabolic SAR (Stop and Reverse)

The parabolic system is a time/price reversal system that uses stop losses. Once a stop loss is hit, it gives you a signal to reverse your position. The SAR indicator is a trend-following system that looks like a series of dots that tend to curve like a parabola.

## How to Use SAR in Trading

This system works well in a trend but not on a range. It gives a good indication of when a trend has ended and reversed. At the beginning of the trend, an uptrend for example, the dots (SAR) start off slow then accelerate as the trend develops and the dots soon catch up to the price action.

### Buy and Sell Signals



Referring to the chart above, as the price moves higher, the dots are below the trend moving higher and are seen as bullish. This is a buy signal. The dots are deemed to be bearish once they move above the prices and the trend changes. This is a sell signal.

If you are already in a position, the SAR can help you time when to exit – so if you are long and the trend reversed, shown by the SAR, then exit (close) your long position.

### Pivot Points

Pivot points can be used to quickly determine market sentiment, as well as to locate support and resistance levels.

The pivot point indicator is known as a predictive indicator as opposed to a lagging indicator like moving averages because it uses more recent data in its calculation. It is comprised usually of seven horizontal lines arranged from top to bottom. The actual pivot point line is located in the middle of all the lines, below the three resistance lines and above the three support lines.



### Advantages of Pivot Points

- ✗ Pivot points can be used to find the level where the market sentiment may switch from bullish to bearish or vice versa. Hence they are good for determining entry point and exit points and also for confirming trend direction.
- ✗ When used to identify support and resistance levels they are more objective compared to Fibonacci levels which involve a bit of subjectivism. There is a specific formula for calculating pivot points, whereas when picking swing highs and swing lows to plot the Fibonacci tool, each trader can be subjective and has a different opinion of where the swings are.

- x Pivot points are easy to calculate, using high, low, and close prices. We will look at the calculations later on.
- x Pivot points are good for range trading as well as break out trading, and good for short term trading (day-trading). This is because you can take advantage of small price movements and trade between support and resistance levels. For example range trade or trade the bounce.

### How to Calculate Pivot Points

You can calculate pivot points by using the open, high, low, and close price for the previous period.

For example to calculate today's pivot points you use yesterday's open, high, low, and close values. To calculate this week' pivot points, use last week's open, high, low, and close values. To calculate this month's pivot points, you use last month's open, high, low, and close values.

Note that the forex market never closes during the 5-day trading week so for the close price it is common to use the New York closing time of 4:00pm EST as the previous day's close.

The classic formula for pivot points is as follows:

First we calculate the pivot point line (PP) and then support levels (S1, S2, S3) and resistance levels (R1, R2, R3) are calculated off the pivot point.

Pivot point	$PP =$	(HIGH + LOW + CLOSE) / 3
First resistance	$(R1) =$	(2 x PP) - Low
Second resistance	$(R2) =$	PP + (High - Low)
Third resistance (R3)	$= High + 2(PP - Low)$	

Third support (S3) = Low – 2(High – PP)

### Trading with Pivot Points

Pivot points can be used for trading different markets. You can use them in a range, or to trade with the trend, or can even be used to trade breakouts.

When trading the trend, pivot points help you determine market sentiment. So if the pivot point price is broken in an upward movement, then the market is bullish, and if broken in a downward trend, it is bearish. Range-bound traders will enter with a buy order near support levels. Otherwise they can place a sell order when the price is close to a resistance level.

If you are a breakout trader, you can use pivot point price levels to enter and exit a trade. For example, if the trend is up and the price breaks above a pivot level, you can enter a buy position and then place your stop loss below the pivot level. For your exit point, you can place your target profit around the next highest pivot level.

### Example of Range Trading with Pivot Points

As we mentioned earlier, pivot point levels are just like support and resistance levels, so prices will likely repeat these levels. In other words, prices will approach a pivot level then reverse and bounce back. This in essence is the act of “pivoting”. The more times these pivot levels are tested, the stronger the level becomes and this will give you a good opportunity to enter a trade at this level.

On the chart below the scenario is that prices are trading sideways, in a range. Prices have been hovering at the first support level for some time, so it looks like this is strong support. You could enter a buy order at this level and target the pivot point level (PP) or the first resistance level (R1).



Set a stop loss at the second support level (S2) or just below it, in order to minimize losses in case the S1 support level breaks and prices fall. To confirm if the support level is strong, you could use other indicators such as stochastics to see if prices are in oversold territory.

Now look at the chart below, where the scenario is the following: prices did move higher and hit the first target level at the pivot point level.



However, you might have experienced an alternate scenario and prices could have fallen and broken below support S1 instead. Let us look at this case and how you could use this as a trading opportunity as well.

### Playing the Breaks with Pivot Points

We know that ranges will not last forever and there will come a time when prices will break the pivot levels. You should be prepared for such a case. There are two ways to trade breakouts: the aggressive way or the safe way. If you prefer to be more conservative and safe, for instance, you could wait for prices to retest support and resistance and then enter a position.

Below is an example of a chart with potential breakout trades using pivot points.



Here we see prices were initially trading in a range between resistance levels R1 and R2. Then prices broke out of range. If you wanted to trade the aggressive way you would have bought right at the break out. But if you see on the chart, sometimes this method is risky. Sometimes there are false breakouts. In this example, prices did not continue moving higher and in fact moved back below the resistance level R3.

If you traded the safer way, you would wait after the breakout for prices to retest the pivot level. In this example, prices broke below R3 to move towards R2 but then retraced to retest R3. At this point you could have entered your sell position. Notice how R3, which was a resistance level, became support and then became resistance again. This role reversal of support and resistance helps you pick where to place your stop level.

Once a support level breaks, in theory, it will likely become support-turned-resistance level. Also once a resistance level breaks, it usually becomes resistance-turned-support. For example, if price broke R1 and moved up, you would buy after the break and place your stop level just below R1.

To set your profit target, aim for the next pivot point support or resistance level. Now look at the chart below:



Here you see that prices first broke above R1. You could set a stop loss level just below R1. Your first profit target is R2. Once R2 breaks, you could target R3 and your stop loss level (stop B) is now just below R2. If prices break above R3, place the stop loss below R3 (stop C).

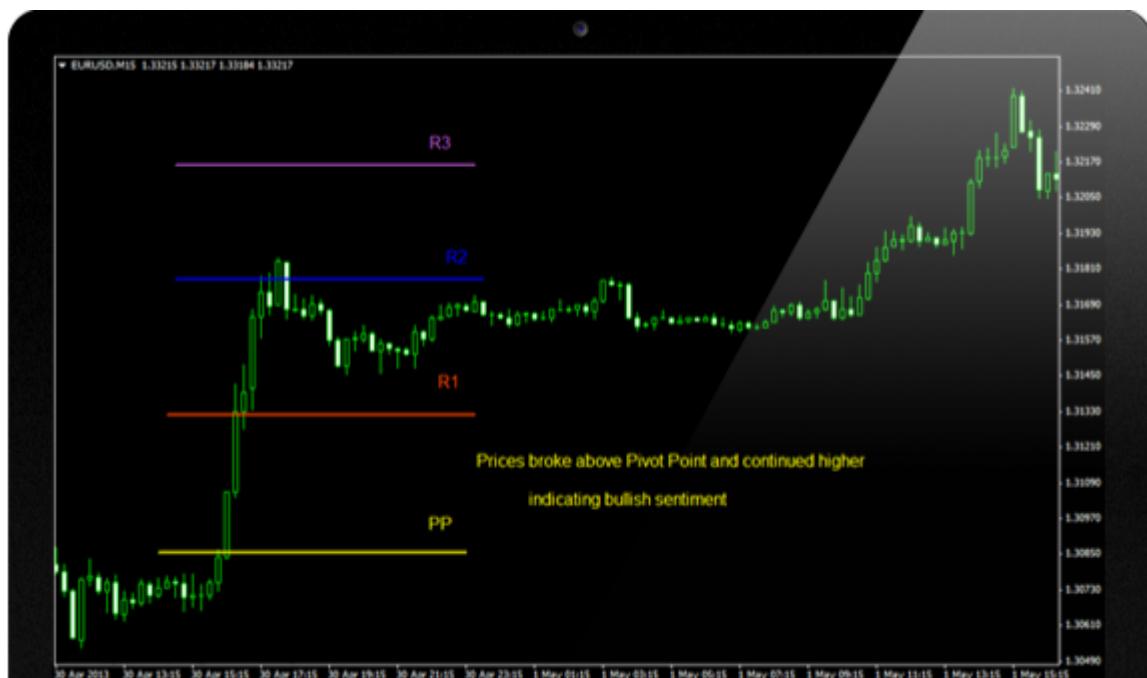
Note that trading breakouts are more risky as prices move faster, especially in volatile markets if there is a news release. Also you are not sure if the breakout is a false one.

You could use momentum indicators to help you make better judgments about price direction. Also you could try recognize candlestick patterns.

### Using Pivot Points to Determine Market Sentiment

In addition to using pivot points to determine entry and exit points when trading, they can also be used to gauge market sentiment. What this means is that you can tell whether traders are bullish or bearish. Are they more inclined to buy or sell?

The way you gauge sentiment is to focus on the pivot point and where prices are in relation to the pivot point. Depending on which side the price is on, you can tell whether buyers or sellers have the upper hand. Look at the EURUSD chart below for example. If the price breaks through the pivot point (PP) to move up, this is a sign that traders are more bullish on EURUSD and you could start buying.



After breaking the pivot point PP, prices then rise higher and higher, breaking through all the resistance levels, maintaining bullish sentiment. However, the alternate scenario is if the price breaks below the pivot point to move down, then you should start selling EURUSD. With the price being below the pivot point, this signals a bearish sentiment and that sellers could have the upper hand for this trading session.

Have a look at an example of bearish market sentiment.



In the chart above, we see that prices tested the pivot point PP, which held as a resistance level and so prices remained below PP, then moved lower and lower, confirming a bearish sentiment. In this case we see that sellers had the upper hand and this is an opportunity for you to sell.

#### Important to Keep in Mind!

As mentioned earlier, there could always be false breakouts. Do not just rely on pivot points. Use them in conjunction with other indicators such as momentum indicators, candlestick patterns, moving averages, etc. There are times when you

think that traders are bearish on a currency pair, only to see that the pair reverses.

lets take the chart below as an example:



In this example, if you saw the price breaking lower from the pivot point you might have sold. However, you would have eventually lost money because later on in the trading session EURUSD moved back up, eventually breaking through the pivot point and moving higher and higher. What's more, the pair stayed above the pivot point, showing how buyers have now taken control and market sentiment changed from bearish to bullish.

Consequently, you must always be cautious since traders can shift sentiment drastically, and use more than one indicator to gauge sentiment.

### Summary

Here is a summary for using pivot point in trading:

- ✗ Pivot points are a technique used by traders to help determine potential support and resistance areas.

- ✗ Pivot points can be used for range, breakout, and trend trading.
- ✗ Range-bound traders will enter a buy order near identified levels of support and a sell order when prices approach near resistance.
- ✗ Pivot points also allow breakout traders to identify key levels that need to be broken for a move to qualify as a strong momentum move.
- ✗ Sentiment (trend) traders use pivot points to help determine the bullishness or bearishness of a currency pair.
- ✗ Using pivot point analysis alone is not always enough. Use them in combination with other technical analysis tools such as candlestick patterns, MACD crossover, moving averages crossovers, the stochastic, RSI, etc. The greater the confirmation, the greater your probability of a successful trade!
- ✗ Pivot points are short-term trend indicators, useful for only one day, and they need to be recalculated.

### Ichimoku Kinko Hyo

The Ichimoku Kinko Hyo indicator was developed in the late 1930's by a Japanese journalist named Goichi Hosoda. He used to write for newspapers under the "pen name" of Ichimoku Sanjin, from which the charting technique he developed derives its name.

If you translate Ichimoku, it means at a glance. Meanwhile Kinko translates as equilibrium and Hyo means chart. The aim of the Ichimoku Kinko Hyo indicator on a chart is to provide us with a broad view of prices with just a single glance. So you would know whether to buy or sell with the information given. Basically this multiple aspect indicator provides traders with the insight of trend, momentum, support and resistance, as well as entry and exit points, all at once, all on a chart.

## Key Elements of Ichimoku Kinko Hyo

Looking at the Ichimoku chart we can see that the indicator is constructed using five lines. A description of each line is given in the chart below:



### Tenkan Sen

The tenkan sen is the red line on the chart and is known as the turning line. It provides buy or sell signals when combined with the kijun sen. It is a faster moving average based on a 9 period exponential moving average derived from the following formula:

$$\text{Tenkan-Sen} = \frac{\text{HighestHigh} - \text{LowestLow}}{2}$$

Note that you do not have to calculate this yourself, since the charting software does this for you automatically.

### Kijun-sen

The kijun sen is the blue line, and is known as the standard line, or base line. This moving average is slower than the tenkan sen and is a 26-period moving average derived from the formula:

$$\text{Kijun-Sen} = \frac{\text{HighestHigh} - \text{LowestLow}}{2}$$

### Chikou Span

The Chikou span is known as the lagging line. It is the current closing price plotted 26 days back. For example, today's closing price plotted 26 days back. The first thing you notice on an Ichimoku chart is a cloud-like feature. This cloud is called the kumo, and it is formed by the Senkou span A and Senkou span B lines.

### Senkou Span A

The Senkou span A leading line 1 is calculated by the following formula plotted 26 days ahead.

$$\text{Senkou Span A} = \frac{\text{TenkanSen} - \text{KijunSen}}{2}$$

### Senkou Span B

$$\text{Senkou Span B} = \frac{\text{HighestHigh} - \text{LowestLow}}{2}$$

The Senkou span B leading line 2 is calculated by the following formula plotted 26 days ahead but using a default period of 52.

### Using the Ichimoku Kinko Hyo in Trading

We have established that the Ichimoku Kinko Hyo indicator provides the trader with various levels of support and resistance, entry and exit points, direction of

the trend, and strength of the signal. Let us look at how we can incorporate this into our trading.

### Support and Resistance with the Kumo

The kumo (cloud) is composed of two Senkou Span lines and where the area between them is shaded in, it makes a cloud-like shape. The cloud incorporates various levels of support and resistance. The theory of this indicator is that when the price is above the cloud, then the top of the cloud will act as a general support level. When the price is below the kumo, the cloud base will act as resistance.

### Finding the Trend

We can see that the kumo is a good trend indicator. If the price is above the kumo, the overall trend is bullish while below the kumo indicates a bearish trend. Meanwhile prices in the cloud mean the trend is unclear and basically a range.

Looking at the example of the chart below, we can see that when prices are above the kumo, there is a bullish trend.



After that prices began to decline and moved below the kumo, indicating that the trend had become bearish.



During sideways price action, prices tend to trade inside the kumo, and are neither above nor below it.



## Tenkan Sen & Kijun Sen Lines for Buy and Sell Signals

You saw earlier that the Tenkan sen and the Kijun sen line were moving averages (9 and 26 day exponential moving averages). When combined, they provide bullish or bearish signals and hence are good for indicating entry and exit points.

A buy signal is created when the Tenkan sen line moves above the Kijun sen, (bullish signal). A sell signal is created when the Tenkan sen line crosses below the Kijun sen line (bearish signal).

Look at the chart below.



## Chikou Span for Signal Strength

There is also one last line called the Chikou Span, which is representative of the current price moved back 26 periods ago. This is where the strength of the signal comes in. Chikou span is essentially a confirmation of the bullish or

bearish sentiment. For example, if you have a sell signal (downward crossover of the Tenkan sen over the Kijun sen) and the Chikou span is below the closing price and below the kumo, we can say the strength is with the sellers. Then the signal strength is considered strong.

Also, if you have a buy signal (Tenkan sen crosses the Kijun sen from below) and the Chikou Span is above the price and kumo, then there is strength to the upside. The signal strength increases.

### Summary

The Ichimoku Kinko Hyo conveys a great deal of information on trend existence, direction, support and resistance.

- ✗ It is good for identifying the trend
- ✗ Can be used in a way similar to moving averages
- ✗ Allows for wider support and resistance zones
- ✗ Decreases the risk of trading false breakouts

### Average True Range (ATR) Indicator

The Average True Range (ATR) indicator simply measures the degree of price volatility from high to low over a given time period. Note that the ATR does not indicate the direction of the price trend, it just measures how much the price can potentially move, usually by a number of pips. This average range of price movement is calculated for the number of periods you require.

For example, if you are trading the hourly chart, and you want the ATR for the last 100 hours, you set the ATR on your chart settings for that amount.

### Advantage of the ATR

By knowing the average range of price movement in the past 100 hours, you can set a better stop loss level and limit the risk on your trade. This will give

you enough breathing room so that you don't get stopped out too soon. For example, if you are trading EURUSD and the ATR was 200 pips in the last 100 hours, you would know that you should set your stop loss for more than 200 pips. If you set it at 50 pips you could get stopped out sooner.

In the EURUSD hourly chart below, we see that for ATR (100 periods) the ATR was about 14 pips.



### Average Directional Index (ADX)

One of the dilemmas that traders will often face is trying to decide how strong the trend is. This is when we can use the Average Directional Index (ADX), to help us decide. The ADX is an oscillator that shows us whether a market is trending or not. It will not show us whether we are seeing an up-trend or a down-trend, but it can help us see if there is really any trend at all and if so, how

strong it is. Therefore, its main purpose is to determine the strength of a trend and not if the market is bullish or bearish.

The ADX indicator fluctuates between a minimum of zero to a maximum of 100. The higher the reading of ADX the stronger the trend will be.



Referring to the chart above, we can see prices are initially in an uptrend before fading into a range. Since ADX only measures the strength of the trend, we can see that as prices rose the ADX reading strengthened to as high as 66. Once prices traded sideways, and there was no longer a trend, the ADX fell and hovered at around 20.

### Summary

The ADX is good for checking if the market is ranging or starting a new trend. Usually if the ADX is below 20, this signifies a non-trending market. Once the ADX crosses above 20, this indicates that a trend might be emerging. If the ADX indicator is increasing between 20 and 40, then it is further confirmation of an emerging trend. So we could consider initiating a buy or sell in the

direction of price movement. If the ADX crosses above the 50 line, this indicates a strengthening in the trend.

### Trading with the ADX Indicator

You probably noticed on the chart, the ADX line was actually accompanied by another two lines, called the +DI and the -DI lines. These DI lines are used for spotting entry signals by observing the crossover between +DI and -DI. Once the ADX peaks above 20 a buy signal occurs when +DI (green) crosses upwards and above -DI (red).

A sell signal occurs when the opposite happens and +DI crosses -DI downwards. Note that when ADX remains below 20 all +DI and -DI crossovers are ignored and you should not trade. It is suggested to us the ADX indicator in conjunction with another trend following indicator to confirm trade entries.

### Important to Know!

It is important to remember not to think that the ADX moves in the direction of the trend! So if the trend was down and strengthening, then the ADX would increase (not decrease) to show a strong downward trend! You can see this in the chart below:



while prices were ranging until early December, ADX hovered below 20. No trend, so we do not enter a trade. Once prices broke out of the range and a trend began to emerge to the downside, then ADX rose above 50, indicating a strong downtrend.

### Best Way to use ADX in Trading

The best method for using ADX is to wait for a breakout in price first before deciding to buy or sell. Once a breakout happens then we can use the ADX indicator as confirmation whether prices will possibly continue in the current trend or not. ADX can also be used to determine when one should close a trade early.

For example if the ADX starts to cross below 50, it indicates that the current trend is losing strength. From then, prices might just trade sideways giving a range. Therefore, you might want to book profits before that happens.

### Elliott Waves

## A Brief Overview

An American accountant by the name of Ralph Nelson Elliott developed the famous Elliott Wave Theory, which he published in his book *The Wave Principle* in 1938.

Elliott analyzed the stock markets covering 75 years of data and noticed a close correlation between investor psychology and price movements. He realized that when crowds of investors reacted to external factors they ended up investing in a certain way. This resulted in repetitive patterns which created market movements that looked like waves.

Therefore, the premise of Elliott's theory revolved around this collective human psychology, where the predominant sentiment of the masses caused a trending market to move in what he called a five and three – wave pattern in any time frame. The first five-wave phase constituted the main trend, while the second three-wave phase was a counter-trend.

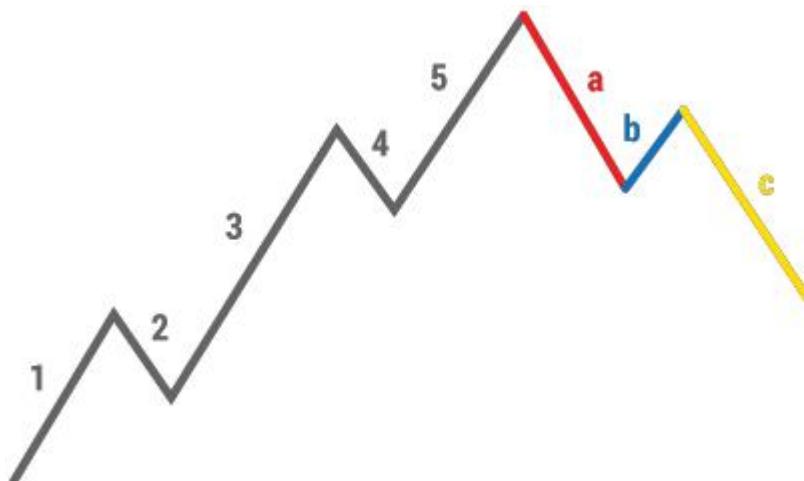
### Advantage – Disadvantage

The aim of Elliott's model is to allow an investor to find the point of an impending reversal. By knowing when a market forms a top or bottom, you would be able to place your buy or sell orders and profit. Therefore, by correctly identifying the repeating patterns in prices, it would be possible to predict where the price will go next.

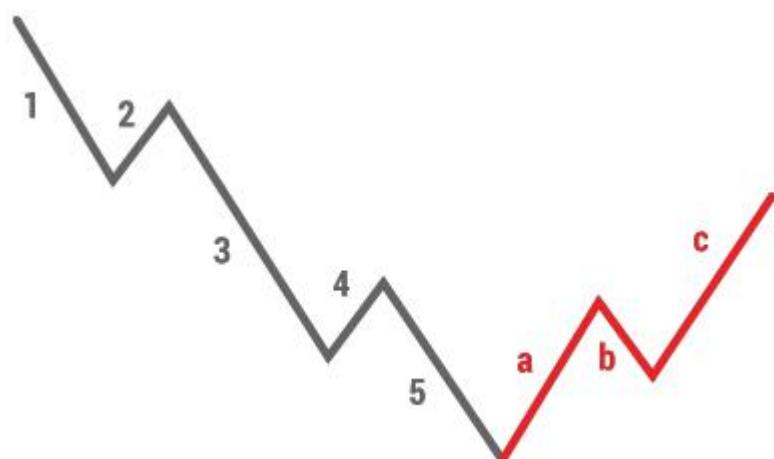
The disadvantage of the Elliott Wave Theory is that it is very subjective and it is quite difficult sometimes to pinpoint the beginning or end of a wave in the five-wave cycle. With a lot of practice one can get better at recognizing these patterns. Now we will look at the key principles of the Elliott Wave Theory.

### The Waves

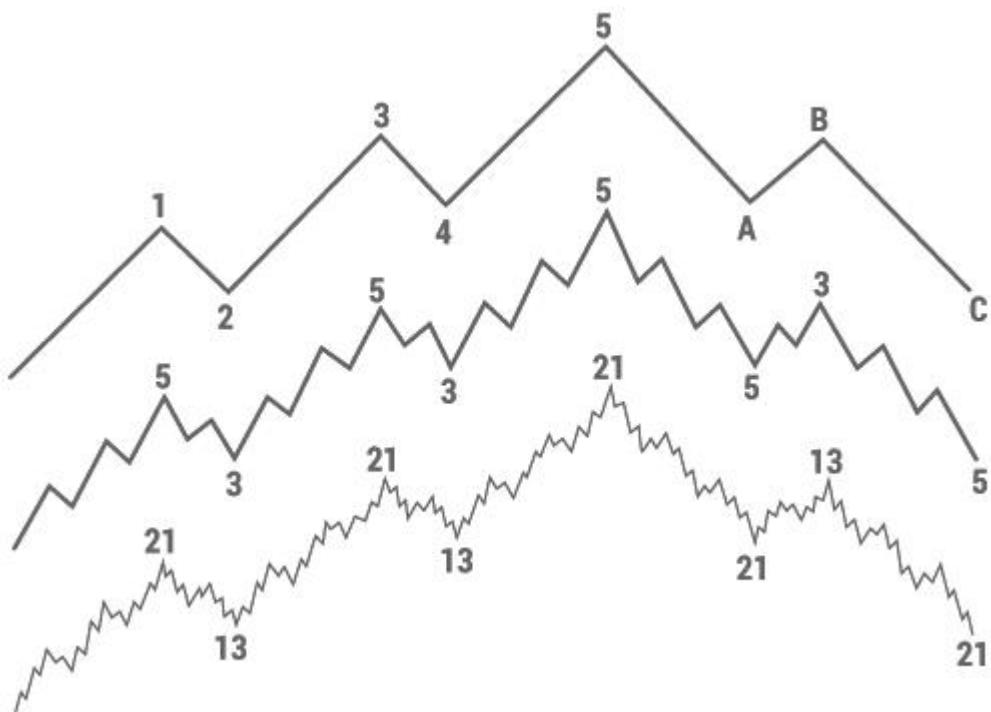
According to the Elliott Wave Theory, the market moves in repetitive sequences of upswings and downswings. A trending market is made up of a motive phase (made up of 5 waves) and a corrective phase (made up of 3 waves). If the market was in an uptrend, the Elliott Wave would look like this:



In a downtrend, it would look like this:



These patterns can be found in any time frame and in smaller and smaller degrees. This means that each larger wave is made up of smaller sub-waves. For example, wave 1 of a 5-wave sequence can itself be broken down into 5 waves.



As you can see, each wave can be broken down to sub waves. The Elliott Wave Theory categorizes these waves in order of the largest to the smallest:

- x Grand Supercycle
- x Supercycle
- x Cycle
- x Primary
- x Intermediate
- x Minor
- x Minute
- x Minuette
- x Sub-Minuette

### The Motive Phase

This phase constitutes five waves. Waves 1, 3 and 5 move in the direction of the trend and are called impulse waves (or motive waves). Waves 2 and 4 are corrective waves. These two corrective waves in the motive phase must not be confused with the corrective phase (second phase after motive phase) in which the waves are denoted with the letters A, B, and C. Remember that for the first phase (motive phase) the waves are always numbered and in the second phase they are lettered.

In the motive phase, often the corrective waves 2 and 4 will retrace to bounce off Fibonacci levels. If we apply the Fibonacci tool on the chart we can usually check to see when wave 2 or wave 4 will end. We will see later in this section how this is useful when trading.

Let us look at an example to describe an uptrend:

- ✗ Prices begin to rise due to some buyers entering the market, creating wave 1.
- ✗ Profit-taking results in the price dropping slightly, to create wave 2.
- ✗ More buyers enter the market and prices rise again to create wave 3. In the Elliott Wave Theory this wave 3 is usually the longest and exceeds the high created at the end of wave 1.
- ✗ Profit taking causes prices to drop again but only slightly as the trend is still bullish. This creates wave 4.
- ✗ Even more investors enter the market at this stage creating an abundance of buyers to create wave 5. Eventually there are no more buyers left in the market as the instrument becomes overpriced. Sellers enter the market. This begins the reversal of the trend to start the ABC pattern, which is known as the corrective phase.

## Rules and Guidelines

Certain observations can be made in the Elliot Wave Theory which give us some tips when trying to analyze the market using this model.

In the motive phase, three basic rules must be observed:

Wave 3 is never the shortest wave of the three impulse waves 1, 3, and 5.

Wave 4 never enters the price territory of wave 1.

Wave 2 never retraces beyond the start of wave 1.

A common observation of waves 2 and wave 4 is that they make alternate patterns. For example, if wave 2 makes a sharp move, then wave 4 will make a mild move, and vice versa.

### Corrective Phase

In the corrective phase there are three types of wave patterns:

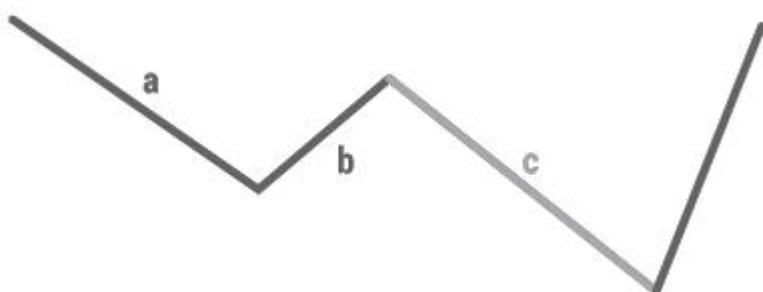
Zig Zags

Flats

Triangles

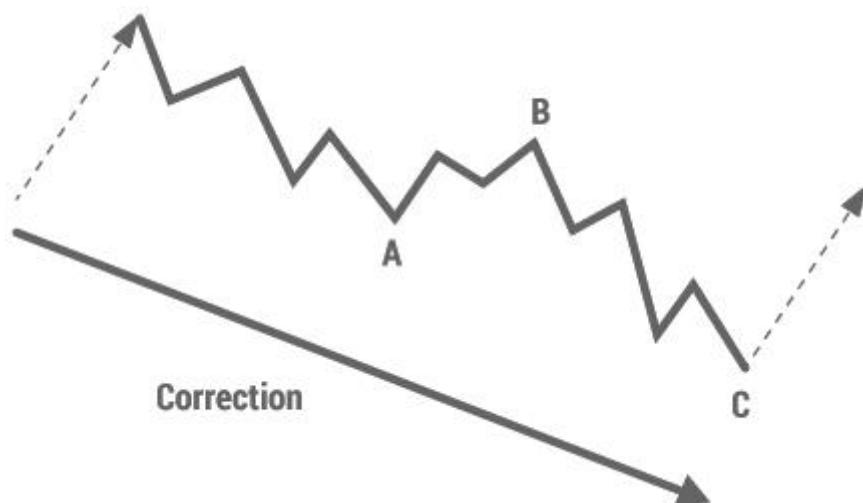
Note that the corrective phase is always made up of three waves A, B, C.

#### Zig Zags

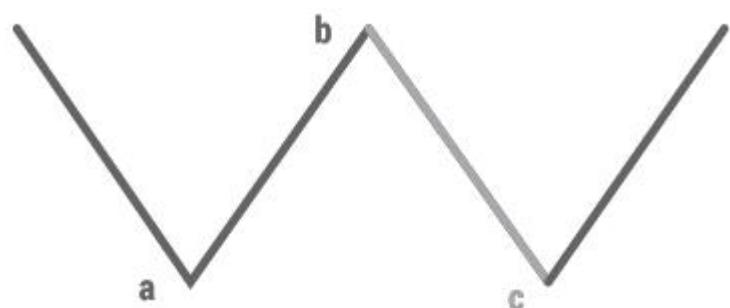


In this example the zig zag pattern applies to an uptrend (in a downtrend you can just invert this pattern).

The zig zag pattern constitutes a sharp move in price that goes against the predominant trend. Wave B is usually the shortest in length when compared to wave A and wave C. As with all waves, each of the waves in zig zag patterns have sub-waves that break up into 5-wave patterns. For example, Wave A can have 5 sub-waves and then wave B has 3 waves for the correction. Then wave C has 5 waves. Look at the diagram which explains this pattern.



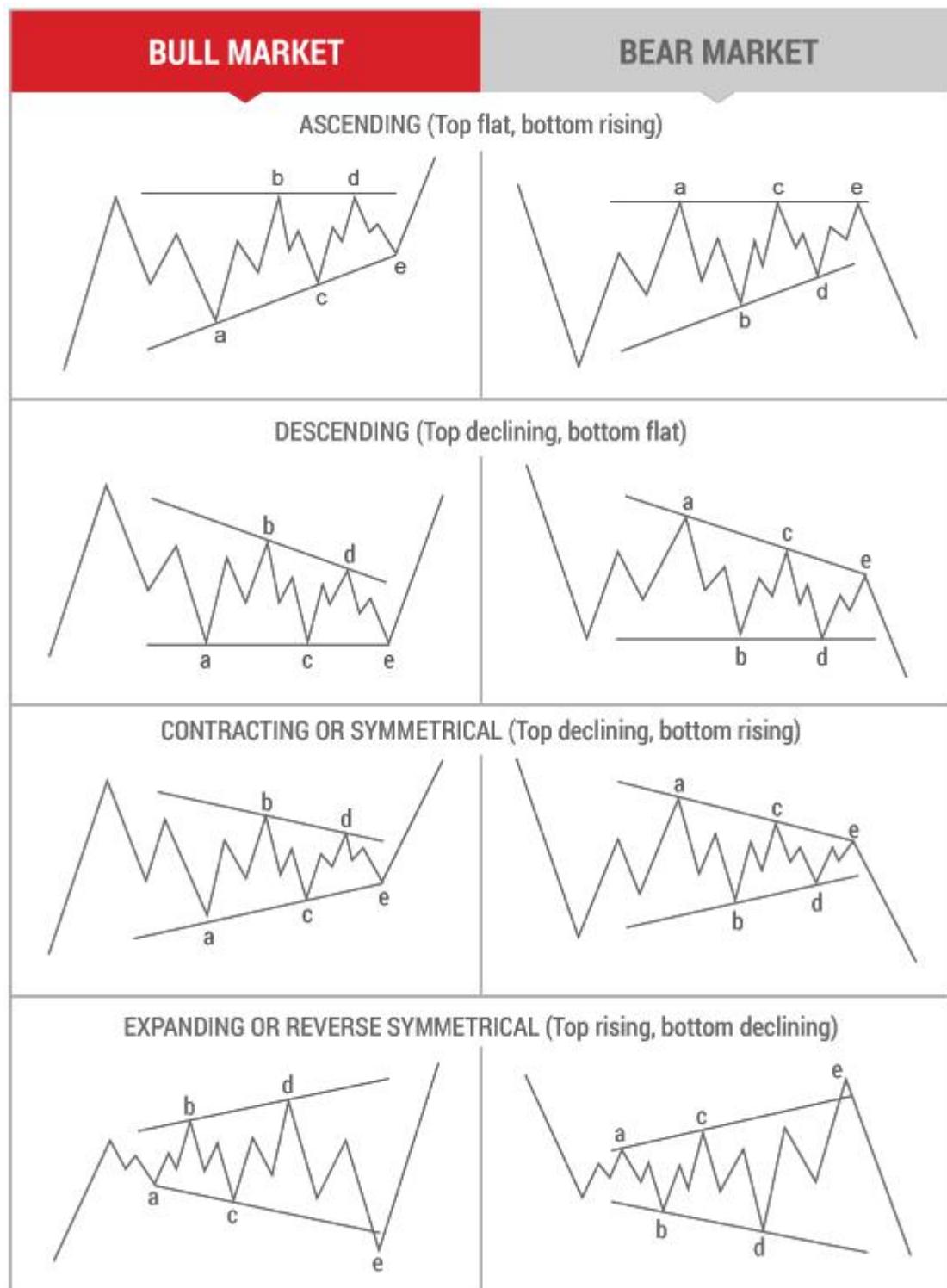
The Flat Formation



When we have a flat formation, the corrective waves move sideways. In this formation, the lengths of the waves are generally all the same length. Basically wave B reverses wave A's move. Then wave C retraces wave B's move.

The Triangle Formation

In the triangle formation, the waves are bound by two trend lines, hence forming a “triangle” shape. These trend lines can be either converging or diverging trend lines. Triangles are made up of 5-waves that move against the trend in a sideways manner. These triangles can be symmetrical, descending, ascending, or expanding.



## How to Use the Elliot Wave Theory for Trading

Elliot Wave principles can be used in trading to determine entry and exit points. Example 1

Let us look at an example of an emerging uptrend. We wait for wave 1 to be completed. Then we check where wave 2 will end we can apply Fibonacci. Remember one of the Rules of the Elliot Wave Theory is that Wave 2 can NEVER retrace beyond the start of Wave 1. If it does, then you made a mistake in your labeling of wave 2. It is always good to place a stop loss just in case.

Looking at the chart below, we can see wave 2 approach a Fibonacci level. This is a possible entry point to buy.

After prices bounce off the Fibonacci level to complete wave 2, then wave 3 begins to form. Remember from the Rules that wave 3 is the longest wave out of the five-wave sequence. It can be a good time to exit and take profits at the end of wave 3 (or at least part of your profits).



### Example 2

Now let us look at an example using corrective wave patterns to help you determine the start of a new motive phase (and for the trend to resume). This will be a good entry point when a new wave 1 emerges.

In the chart below, we can see that after the downtrend has ended, a corrective phase forms (A-B-C). In this case we have the flat formation. This means prices

correct in a sideways fashion. This gives you a signal that prices may just begin a new impulse wave once wave C ends.



This could be a good opportunity to place a sell order in anticipation of a new wave forming. Just to be safe in case your wave count was wrong, you can place your stop just a few pips above the start of Wave 4.

You can see that after the corrective phase and wave C ended, the downtrend resumed and we have a new wave 1. This would be a good opportunity to take some profits!

### Forex Education – Chapter 3

### Build your Trading System in Six Steps

In Chapter 2 you learned all the important elements of technical analysis. In this chapter you will learn how to combine all this information into a trading system.

Our system is trend following, which means that you should always trade in the direction of the trend. You will learn how to use various technical indicators to identify trend and find the correct entry and exit levels.

The system described here is built in 6 steps:

Step 1: Define your time frame

Step 2: Identify the position of the market

Step 3: Find support and resistance levels

Step 4: Find your entry levels

Step 5: Find your exit levels

Step 6: Use multiple time frame analysis

As you become more experienced you might want to develop your own system that would fit your knowledge, personality and risk tolerance. It is vital for you as a trader to have a trading system, as this will limit trading mistakes and minimize your losses. It will prevent you from making any irrational decisions in the heat of the moment. Instead it will allow you to trade with less emotion and stress.

A trading system is only effective if it is followed. You have to stick to it and in order to do this you need iron discipline. It sounds simple but most traders still can't do it. You must write your trading system rules down and always follow them.

Remember to always test your system. The easiest way to do this is through the MT4 platform. Go back in time and move the chart forward to see how your system would behave. Record its performance and if you are happy with the

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results start trading on a demo account. If after a while you are still getting good results, then you can choose to trade your system on a real account. At this point, you should have confidence in your system and feel comfortable making trades with no hesitation.

### Define Your Time Frame

The time frame you choose to trade should fit your personality. If you don't have time to watch the markets all day long and need more time to analyze each trade then you are a natural long term trader.

The time frame of your charts should be either daily or even weekly. In this way you will make fewer transactions and pay the spread less often. Since your system will issue only a few signals each month or year, you will have to be patient. Long term trades require bigger stops, so a bigger account is needed if you don't want to receive margin calls.

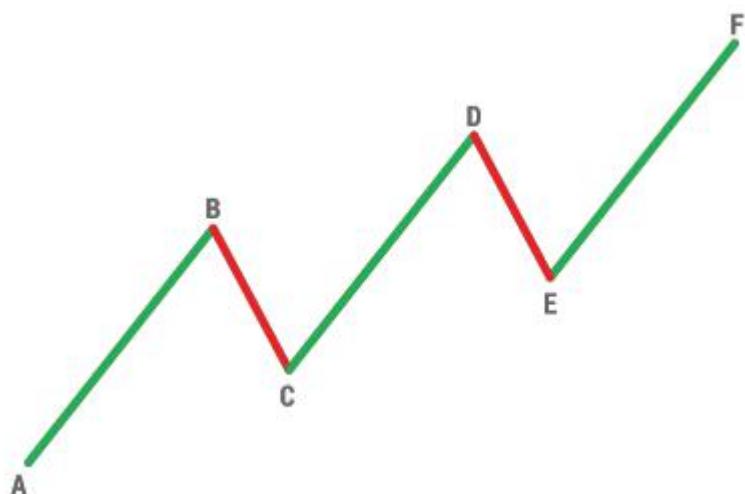
On the other hand, if you are impatient, you spend most of your time watching the screen and you feel the urge to press the button, a long term time frame is not for you. Instead you should be an intraday trader using 15-minute or even 1-minute charts.

In this way you will have many trading opportunities every day and you will avoid overnight risks. However, you will pay the spread more often and you will need more stamina to remain focused and frequently change biases.

Somewhere in the middle are the swing traders, who use hourly charts to execute short term trades that last for several hours or even days.

## Identify the Position of the Market

It is important to identify the trend and the wave in the time frame you want to trade in. You should always trade in the direction of the trend.



In the illustration above you see an uptrend which we defined as a series of consecutive higher highs and lows. This uptrend consists of 5 waves:

Wave 1: from A to B

Wave 2: from B to C

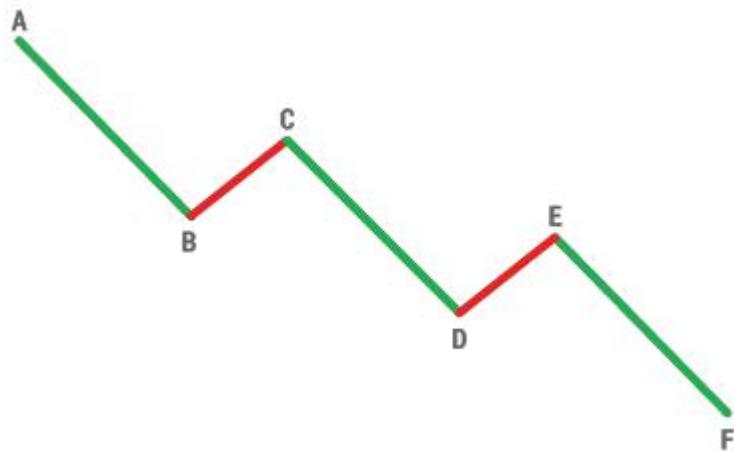
Wave 3: from C to D

Wave 4: from D to

Wave 5: from E to F

You also notice that waves 1, 3 and 5 move in the direction of the uptrend, whereas waves 2 and 4 move opposite the direction of the uptrend i.e. they are corrective.

Similarly, in the figure below waves 1, 3, and 5 move in the direction of the downtrend, whereas waves 2 and 4 move opposite the direction of the downtrend.

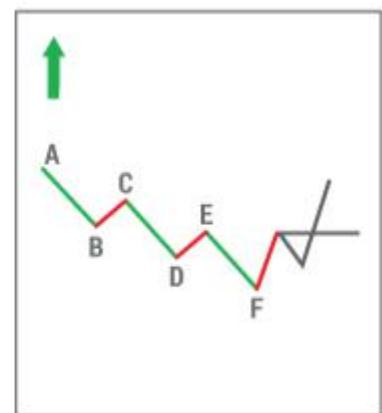
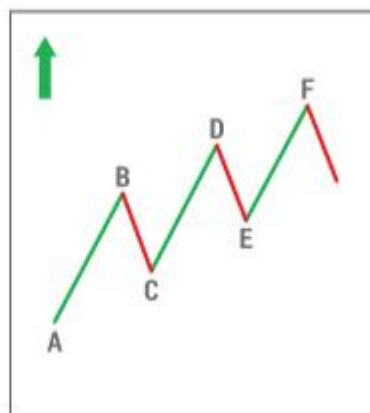
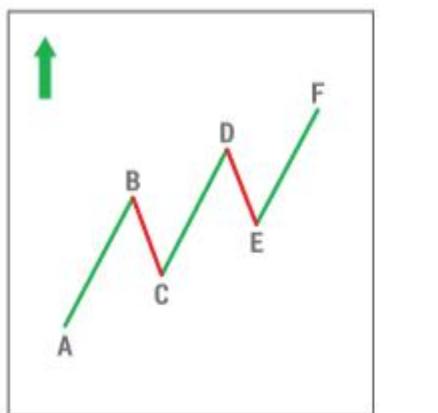


Trend

We use 4 indicators to identify the trend and use arrows to visualize the direction.

Price Patterns

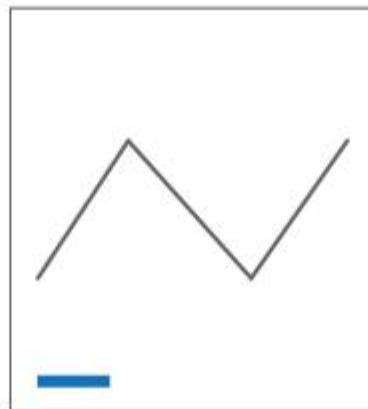
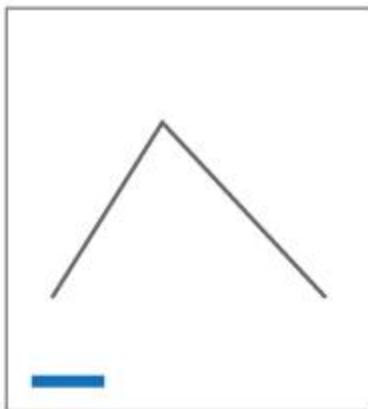
Uptrend



Downtrend



Range



MACD against zero line. If  $MACD > 0$ , then If  $MACD < 0$  then

Exponential moving average of 55 periods (EMA55) against price. If EMA (55) is higher, then the price

If EMA (55) is lower than price, then

Price ROC of 25 periods against zero line. If  $ROC(25) > 0$ , then . If  $ROC < 0$  then

If there are more UP arrows than DOWN arrows, the trend is up – and vice versa.

Note that if the market is trading in a range, the only indicator that can be used is ROC(25).

### Wave

We use the following 4 indicators to identify the direction of the wave:

RSI (14) against its simple moving average of 7 periods (RSI7). If RSI (14) > SMA (7) then if RSI (14) < SMA (7) then

MACD against its signal line. If MACD > Signal then If MACD < Signal then

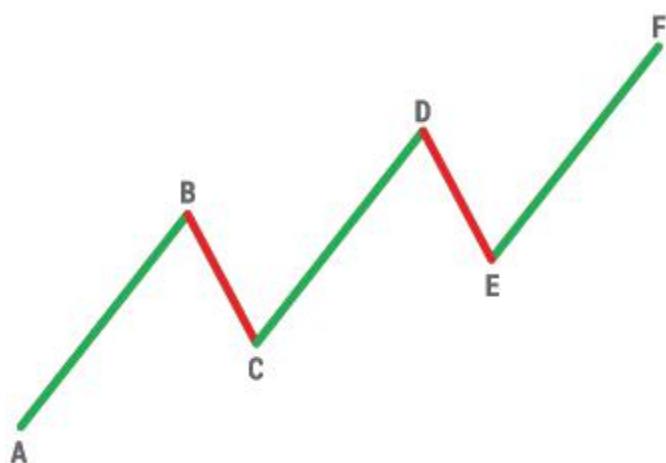
Exponential moving average of 20 against price. If Price > EMA(20) then If Price < EMA(20) then

Stochastics (14,3,3). If %K line > %D line then If %K line < %D line then

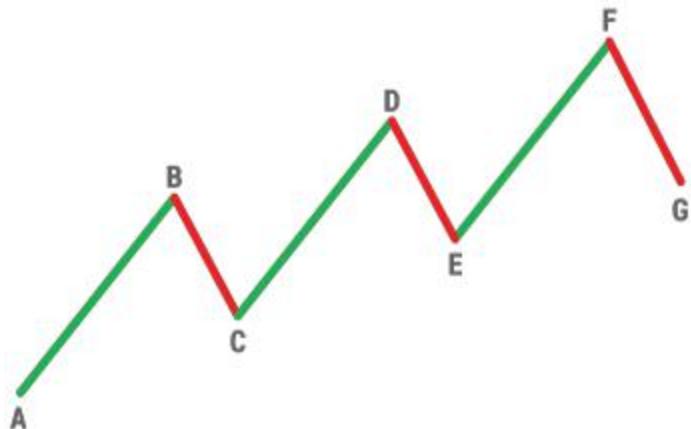
If there are more UP than DOWN arrows, the wave is up and vice versa.

### Overbought / Oversold

Once you identify the trend and Wave what is left is to check if the market is overbought or oversold.



In the illustration above both the trend and the wave are UP. However, at point F the market might be overbought. As a result, a correction should be expected. So, it is better to wait before you buy.



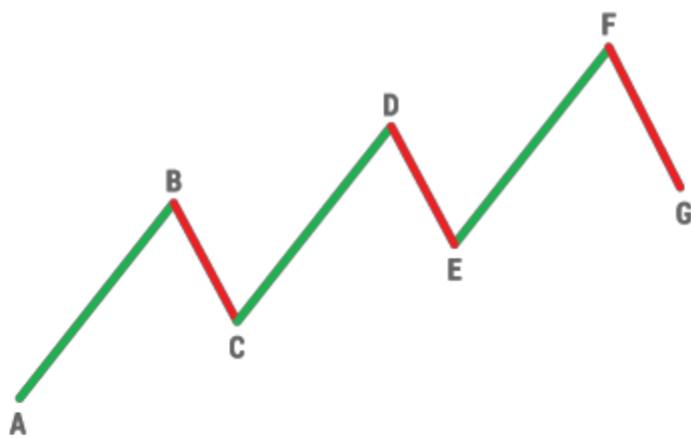
At point G the trend is UP but the wave is down. If the market is oversold, a good buy opportunity arises.

We use 2 indicators to identify overbought/oversold conditions.

- ✗ Histogram MACD at extreme levels
- ✗ ROC (7) at extreme levels

Once we finish our analysis, we fill in the table below.

Hourly Market Positioning			
Resistances	R1:	R2:	R3:
Support	S1:	S2:	S3:
TREND	Price Patterns	↑	
	EMA (55)	↑	
	MACD vs Zero	↑	
	ROC vs Zero	↑	
WAVE	RSI (14) vs SMA (7)	↓	
	MACD vs Signal	↓	
	EMA (20) vs Price	↓	
	Stochastics (14,3,3)	↓	
Overbought / Oversold	MACD Histogram	S2:	Oversold
	ROC 7	Oversold	



As an example, this is how the table would look if we did our analysis when the market was at point G above.

Now you have learnt how to analyze the market and identify the direction of the trend and the wave. You also know that you always trade in the direction of the trend, in the time frame you choose to trade.

So when the trend is up you BUY and when the trend is down you SELL. The question is when you BUY or SELL? It is always safer to enter your trades near support or resistance levels as you can control your risk better. You will learn about this in the following lesson.

## Find Support and Resistance Levels

There are various methods that you can use to find support and resistance levels.

- x Peaks and troughs
- x Support and resistance levels from a previous time frame
- x Fibonacci levels
- x Moving averages
- x Trend lines

### Peaks and Troughs

Once you open the chart in the time frame you will be trading, identify the highest peak on the chart and mark it as the All Time High (ATH). Then find the lowest bottom and mark it as the All Time Low (ATL).

In the example below, we have a chart showing prices are in a downtrend. You mark each peak and trough with a short horizontal line. In a downtrend, each lower low will be a support level and each lower high will be a resistance level.

Just have a look at the the chart below.



In an uptrend, we have the opposite. Each consecutive higher peak will be a resistance level, and each higher trough will be a support level.



### Support and Resistance from Previous Time Frames

Another way to find support and resistance levels is to look in higher time frames to find the levels from there.

Looking at the chart below for example, if you are currently using a 15 minute time frame, look in the 1 hour time frame and incorporate the support and resistance levels from there into the 15 minute time frame. Then look into the 4 hour time frame and take those support and resistance levels to put in the current 15 minute time frame.

Note that if the support and resistance levels from higher time frames match those support and resistance levels of the lower time frame, (meaning they have the same price levels) then these would be more important and stronger support and resistance levels.



## Moving Averages

Another method of finding support and resistance levels is using moving averages.



In a downtrend, the moving average line usually acts as a resistance and prices bounce off it and fall back down, as we can see in the chart above. In an uptrend, the moving average acts as support. In the example below, we can see that prices bounce off the moving average. We normally call this type of support, dynamic support, because the level changes every time the moving average moves.



You can use different periods of moving averages, such as the 20-day moving average or the 55-day, and so on. It can be a simple or exponential moving average. We looked at moving averages in detail in an earlier section of the course.

### Fibonacci Levels

Another popular method of finding support and resistance levels is to use Fibonacci retracement levels.

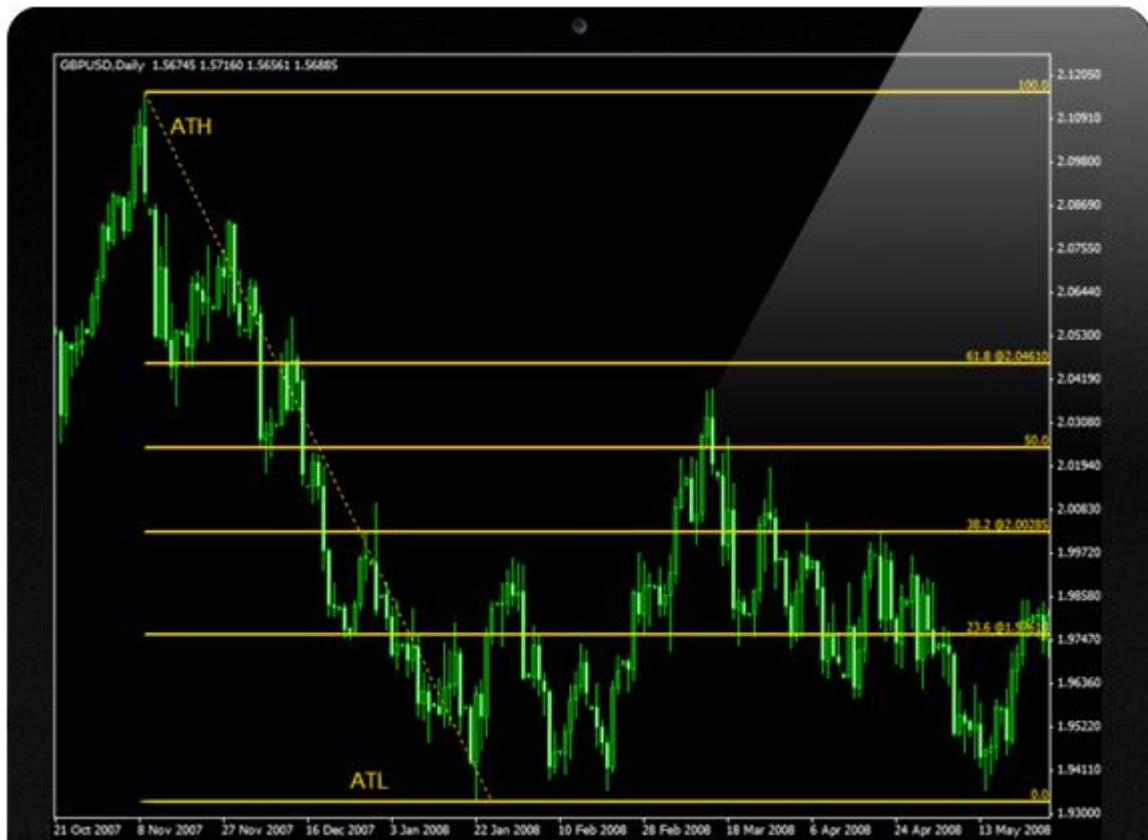
We will not go into detail right now about Fibonacci since we have already explained this subject earlier in the course. What we would like to point out now is that the Fibonacci Retracement levels are used for support and resistance. The most common levels used in forex are 23.6 %, 38.2% and 61.8%.

After a significant price move, either up or down, prices will often retrace a significant portion of the original move. As prices retrace, support and resistance levels often occur at or near the Fibonacci retracement levels.

Let us look at an example. In an uptrend, we mark the Fibonacci retracement levels from the ATL to the ATH. In the chart below, we can see that after a strong move up, prices retraced part of that upmove by 38.2% and 23.6%, where prices rested for a while. Therefore, we can use this 23.6% and 38.2% Fibonacci retracement level as support levels. Also once ATH is penetrated, this can be used as a new support level.



In a downtrend, we mark the 23.6%, 38.2% and 61.8% Fibonacci retracement levels from the ATH to the ATL. We can see in the chart that after a strong move down, prices retraced to reach various Fibonacci retracement levels. We can use these retracements as resistance levels.



### Significance of Trend Lines as Support and Resistance

In the chart below we can see that the uptrend line acts as support and price action appears to hold above this line. In a downtrend, prices stay below the downtrend line, which acts as resistance.



It is required to have at least two points, either two peaks or two bottoms in order to draw a trend line. This would be called a tentative trend line. If we have three or more points, this will be a valid trend line. The more points a trend line has, the more confirmed and the more important the trend line becomes.

When prices trade sideways in a range, they create strong support and resistance levels. This is because prices test these levels several times and bounce between the same support and resistance level a few times.

Once we find the support and resistance levels using all methods, we combine all the levels to select the more important ones. The most important are those levels who coincide when using different methods. For example if a trough coincides with 61.8% Fibonacci retracement and also with EMA (55) then it should be regarded as potentially strong support.

Now you know how to find the direction of the Trend and Wave at the time frame you choose to trade. You also learned how to find potential support and

resistance levels close to which you should execute your trades. Now you will learn when to BUY or SELL.

## Find your Entry Levels

First of all, you should now that there are three main ways to enter the market:

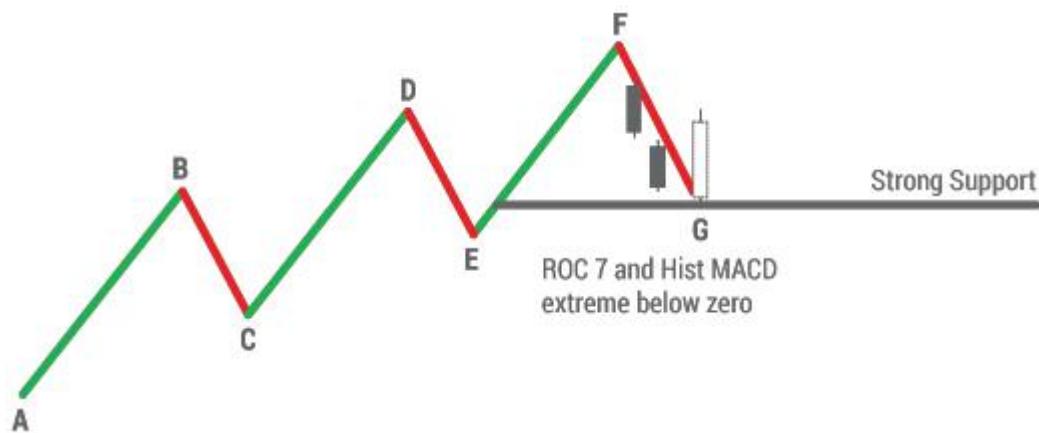
- x Trading the Bounce
- x Trading the Breakout
- x Trading the Trend Reversal (Failure Swing) Trading the Bounce

This is a highly preferred strategy as it is usually less risky than any other methods. In an uptrend this strategy involves buying on dips (the pullback), while in a downtrend you would sell on rallies (after prices temporarily bounce back up before continuing to fall).

You identify support and resistance levels on our chart by applying the methods explained in the previous section. After marking these levels, you can focus on looking for a good entry point.

### Example for Buying the Dip

In an uptrend, you wait for prices to dip to a strong support level and wait for a bounce from this support for prices to rise again. At this point the trend is UP and the wave is DOWN. If ROC (7) and Hist MACD are both oversold, there is a higher probability that the support will hold.



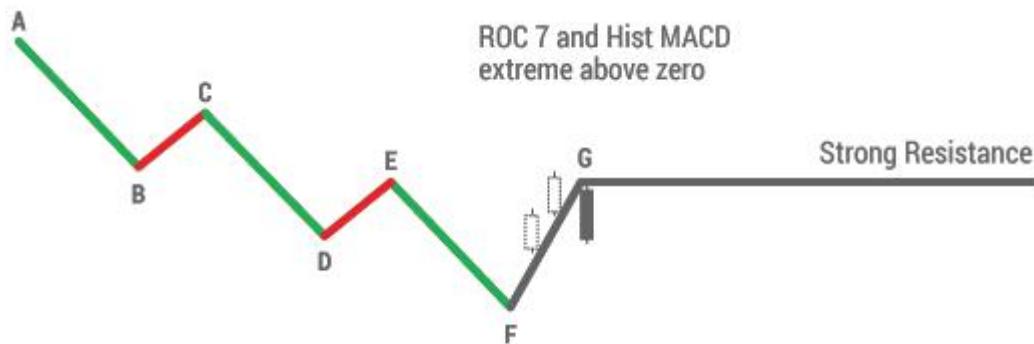
It is usually best to wait for prices to bounce first before we BUY rather than set an order right on the support. This way you can make sure the support level will hold.

Be careful not to buy on a black candle. You also make sure the white candle has a long body. Wait for this white candle to close above the close of the last black candle before you enter a buy position. You place a stop loss a few pips below the support level, in order to minimize our losses in case the market does not move the way we want it to.

To sum up, the following conditions should apply when you buy a dip:

- x Trend is up
- x Wave is down
- x ROC (7) and Hist MACD are oversold
- x Prices bounce from a strong support
- x Buy on a white candle
- x Set your stop loss below support

Example for Selling the Rally



Similarly the following conditions should apply when you sell a rally:

- x Trend is down
- x Wave is up
- x ROC (7) and Hist MACD are overbought
- x Prices bounce off from a strong resistance
- x Sell on a black candle
- x Set your stop loss above resistance

### Trading the Breakout

This trading strategy is more risky than the bounce strategy. In an uptrend this strategy involves buying when prices break a resistance level. In a downtrend, you sell after prices cross below a support level.

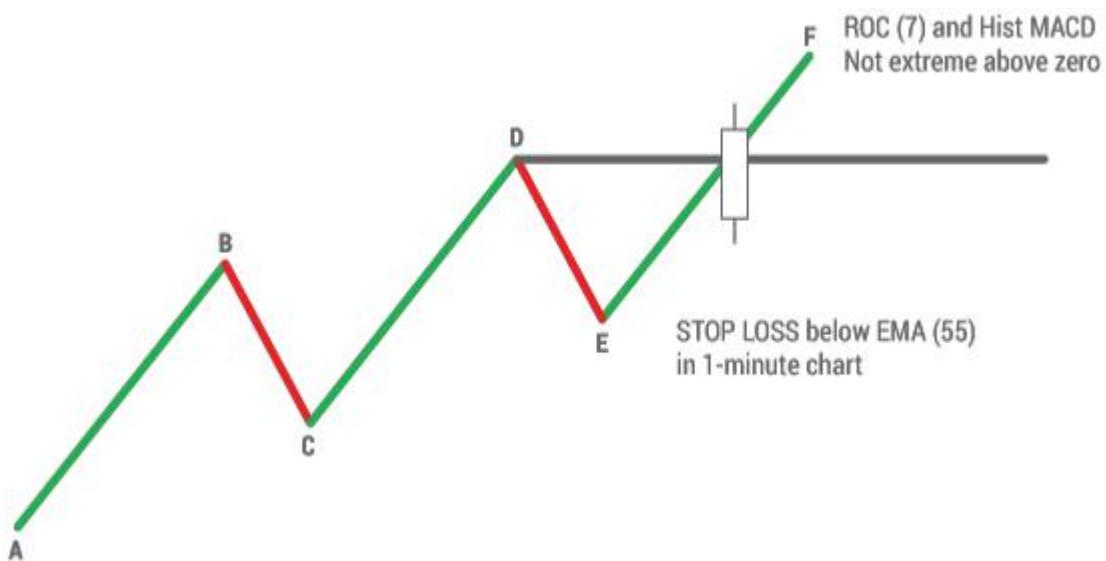
Usually, a breakout takes place out of a certain chart pattern, such as a consolidation range, a triangle, or a flag, etc.

Filter: To assume that the breakout is valid you should turn to a 1-minute chart and wait for two white candles above resistance or two black candles below support.

### Example for Buying the Break of a Resistance

The following conditions should apply when you buy a breakout:

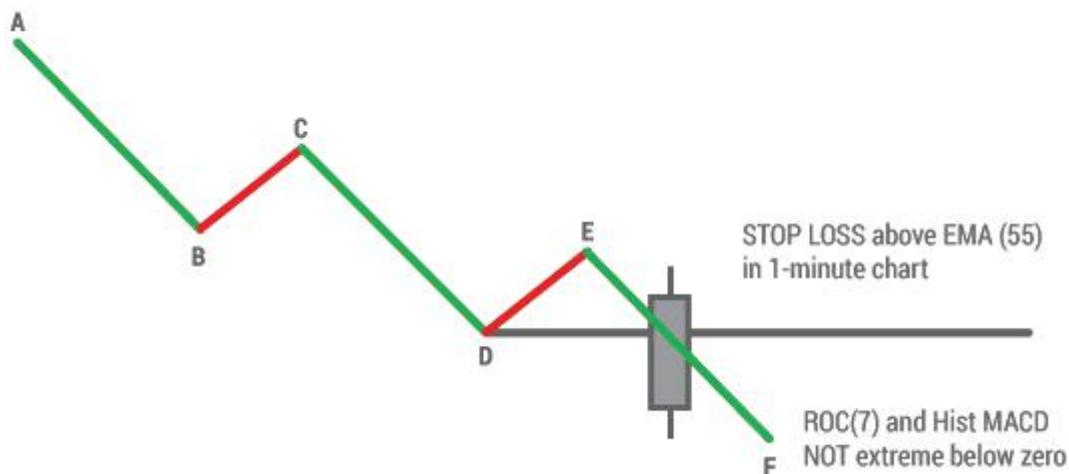
- x Trend is up
- x Wave is up
- x ROC (7) and Hist MACD are not overbought
- x Buy when prices break a Resistance level. Remember your filter.
- x Set your stop loss below EMA(55) in a 1-minute chart.



#### Example for Selling the Break of a Support

The following conditions should apply when you sell a breakout:

- x Trend is down
- x Wave is down
- x ROC (7) and Hist MACD are not oversold
- x Sell when prices break a support level with a strong black candle
- x Set your Stop Loss above EMA(55) in a 1-minute chart

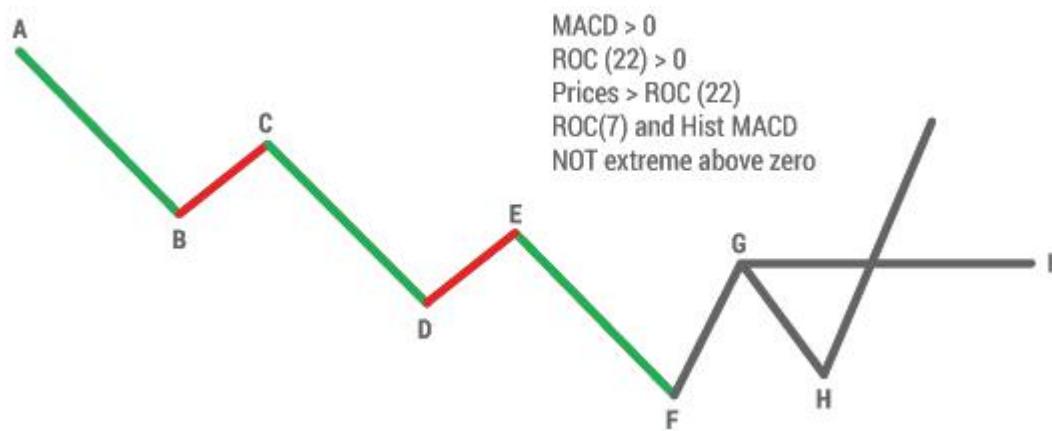


### Trading the Trend Reversal (Failure Swing)

A failure swing signifies that a trend is about to reverse. This is a good opportunity to enter the market.

#### Example for Buying the Trend Reversal (Failure Swing)

In a downtrend, prices fall to the lowest point F but subsequently the trend weakens and prices are unable to form a new low. In this case we have a failure swing. Price fail to swing lower and trough H is higher than the previous low. So prices continue to rise breaking resistance level G, and you would enter a buy position at point I.



The following conditions should apply when you buy a trend reversal:

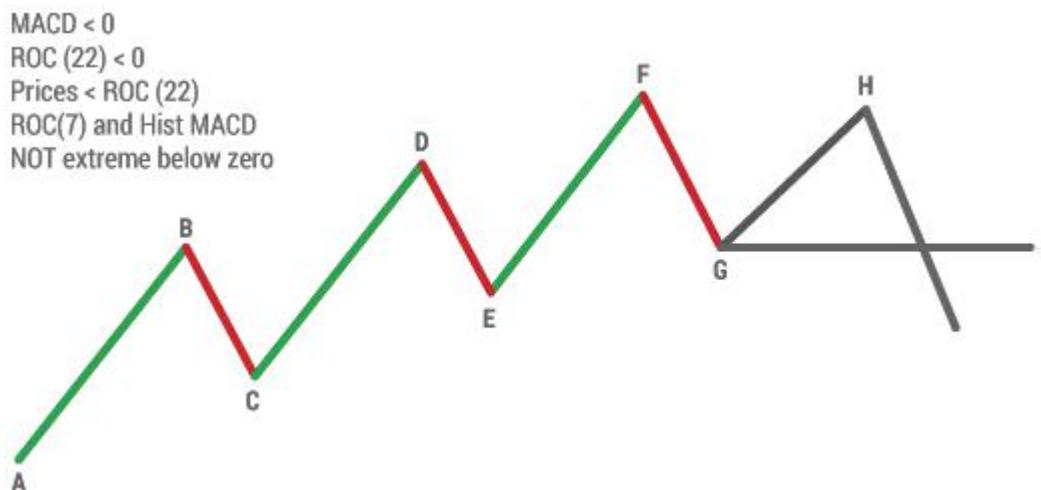
- x Trend turns up

- x Wave is up

- ✗ ROC (7) and Hist MACD are not overbought
- ✗ Buy when prices break previous high with a strong White candle
- ✗ Set your Stop Loss below EMA(55) in a 1-minute chart

#### Example for Selling the Trend Reversal (Failure Swing)

In an uptrend, prices rally to peak F, but subsequently the trend weakens and prices are unable to form a new high. In this case we have a failure swing. Price fail to swing higher and peak H is lower than the previous peak. So prices continue to drop past support level G, and you would enter a sell position at point I.



The following criteria should apply when you sell a trend reversal:

- ✗ Trend turns down
- ✗ Wave is down
- ✗ ROC (7) and Hist MACD are not oversold
- ✗ Sell when prices break previous low with a strong black candle
- ✗ Set your Stop Loss above EMA(55) in a 1-minute chart

This completes the section on finding entry levels and we move on to explain exit levels (finding targets).

## Find your Exit Levels

Beginners look for promising entry points and they believe that when they find them that will give them money. Professionals on the other hand, spend a lot of their time managing their trades and looking for exits. If you truly want to trade with more profits than losses, you should consider the information below.

There are 2 kinds of exit signals: Stop Loss and Take Profit

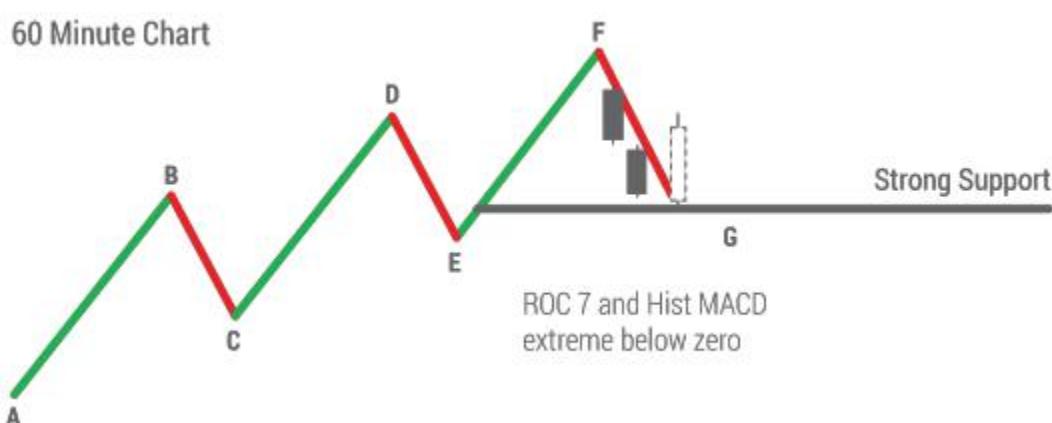
### Setting the Stop Loss

Your stop loss depends on your entry point, and so for each entry point we analyzed in the previous section you already know where to set your stop loss.

### Trading the Bounce

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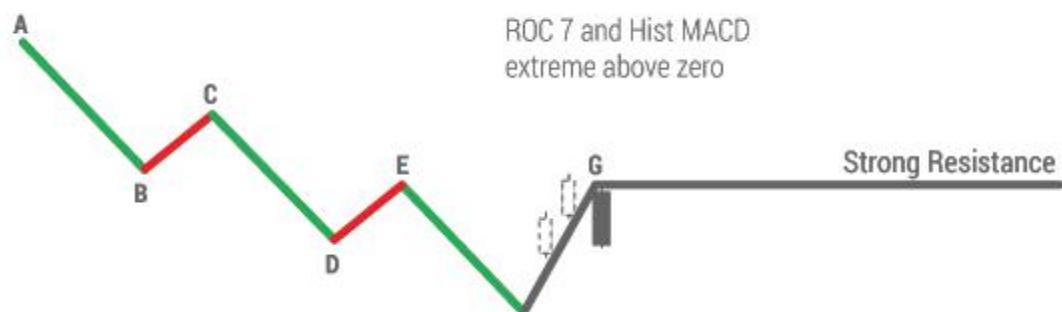
Example for Buying the Dip: The stop loss should be below support G.



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Example for Selling the Rally: The stop loss should be below resistance G.

### 60 Minute Chart

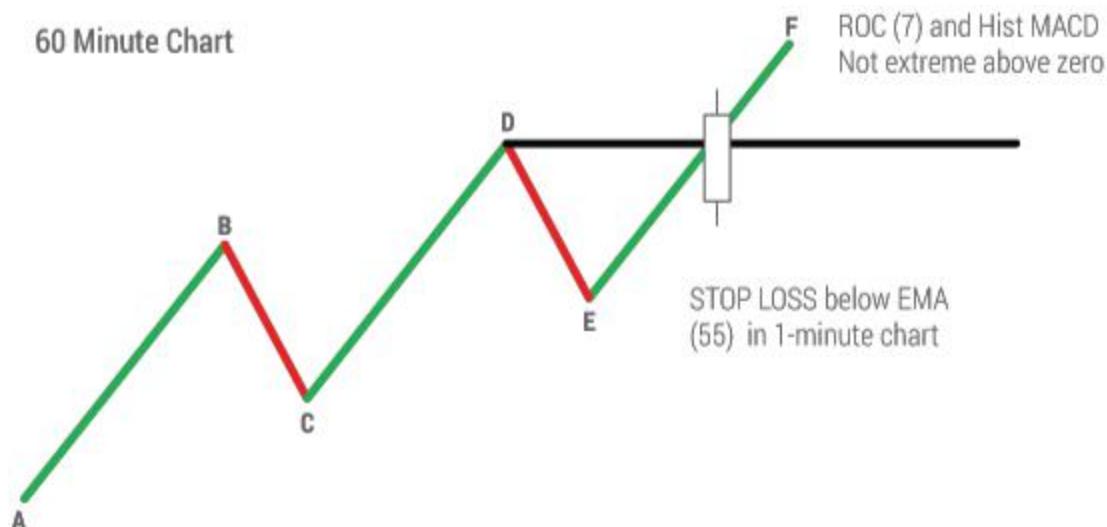


### Trading the Breakout

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Example for Buying the Break of a Resistance: The stop loss should be below EMA (55).

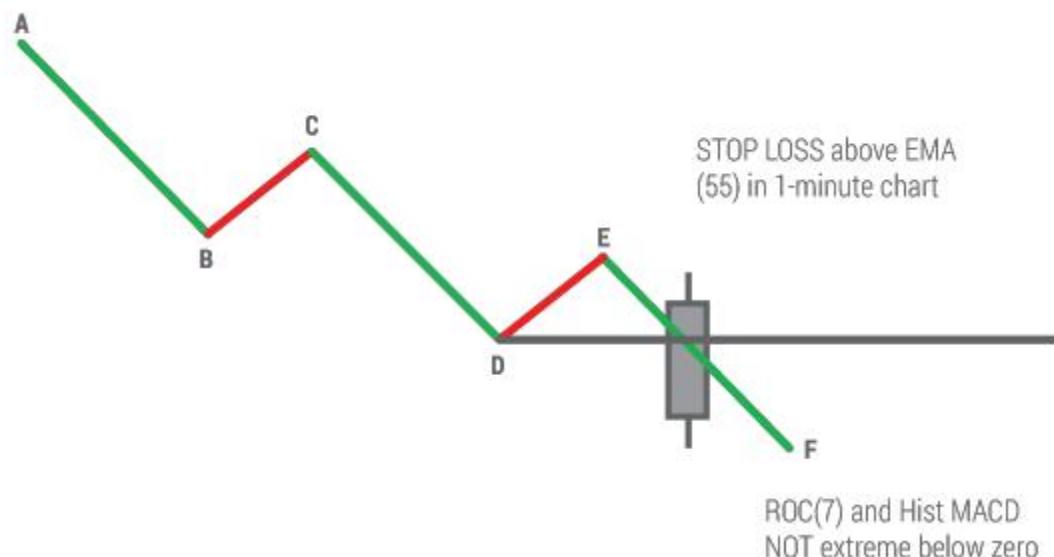
### 60 Minute Chart



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Example for Selling the Break of a Support: The Stop Loss should be above EMA (55) 1-minute chart.

### 60 Minute Chart

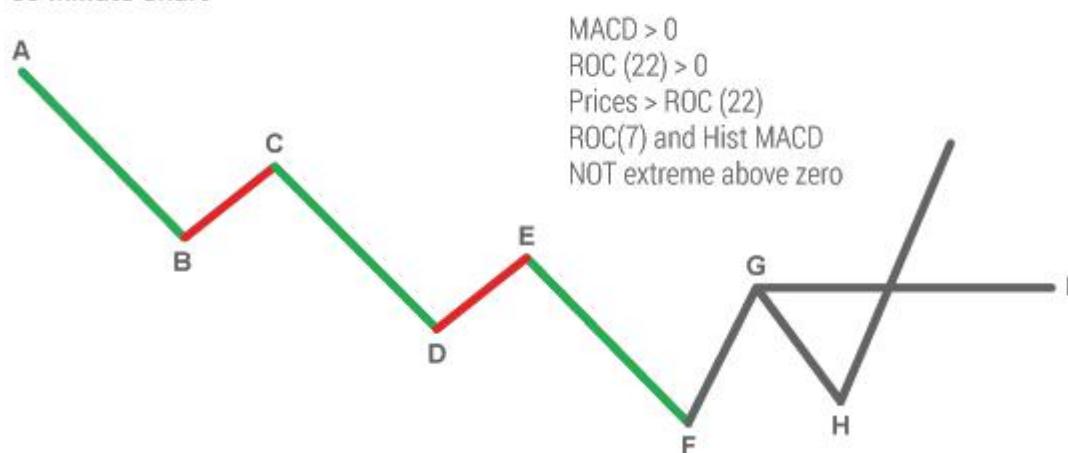


### Trading the Trend Reversal (Failure Swing)

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Example for Buying the Trend Reversal (Failure Swing): The stop loss should be below the failure level H.

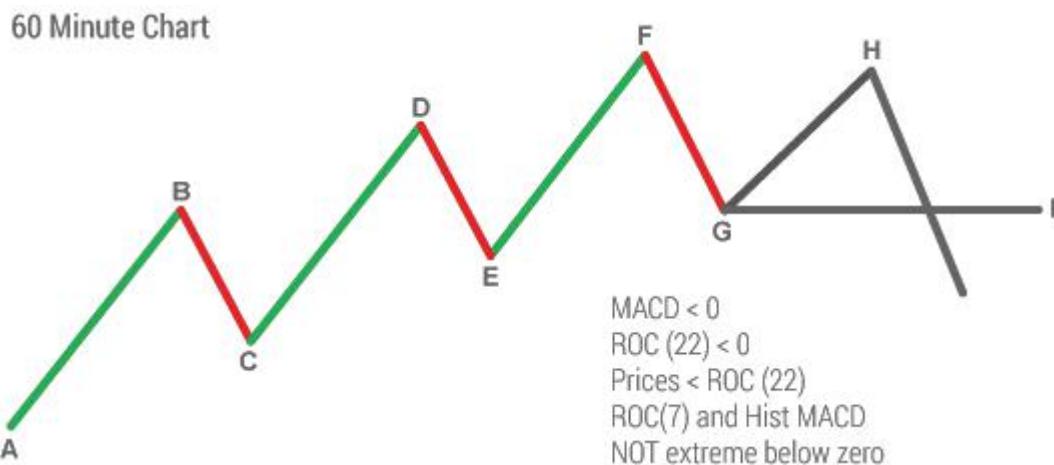
### 60 Minute Chart




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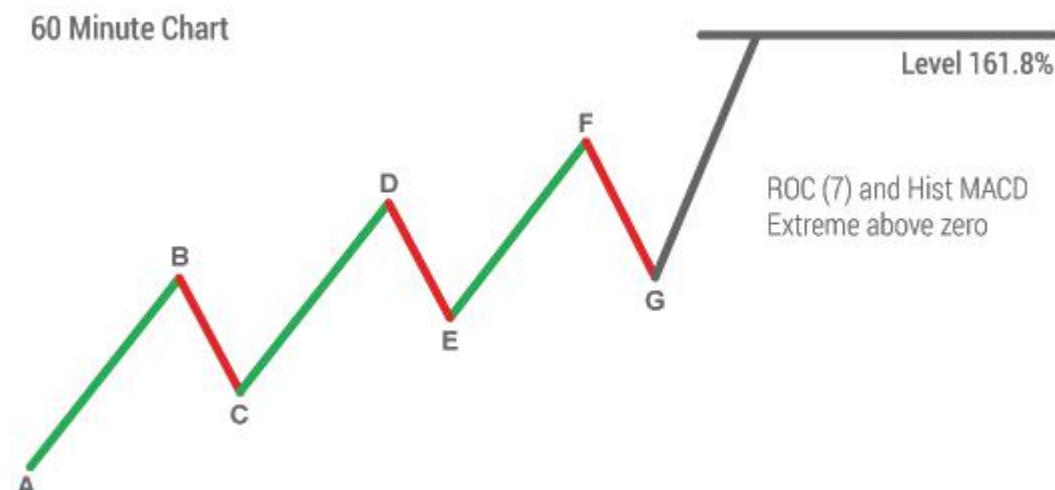
Example for Selling the Trend Reversal (Failure Swing): The stop loss should be above the failure level H.

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### Set Your Take Profit

Close 50% of the position at 161.8% Fibonacci extension level and change the stop loss of the remaining at the opening price. At the next resistance close 50% of the remaining position (25% of the original position) and move the stop loss higher. At the next resistance close the remaining 25%.



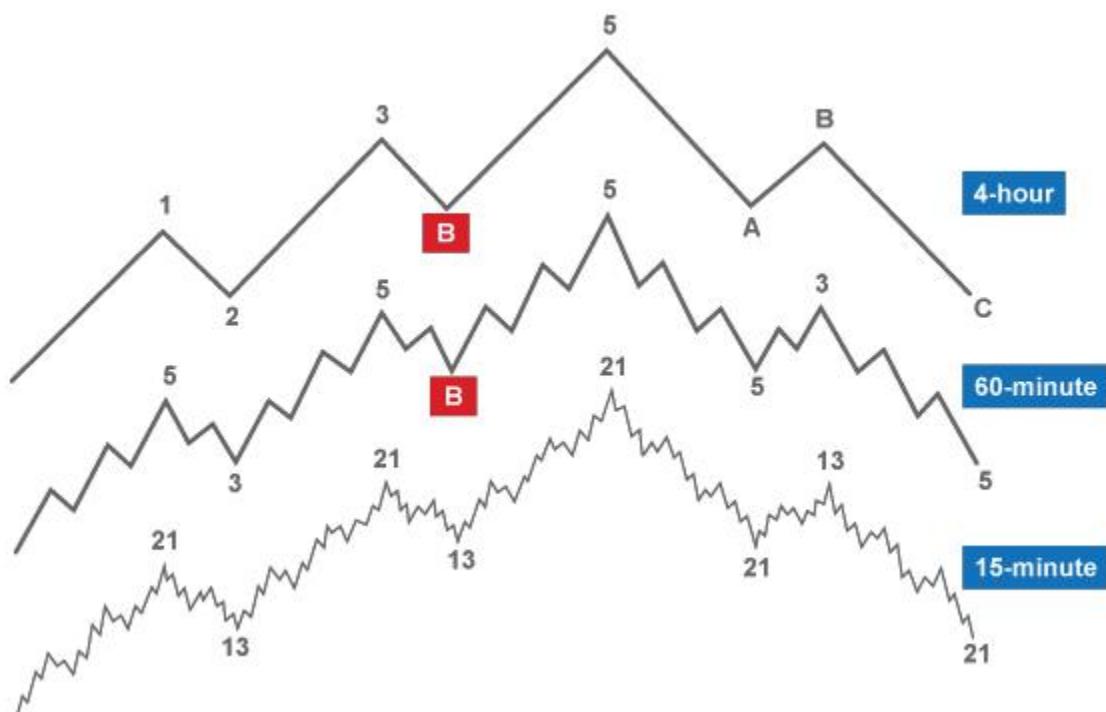
PREVIOUSNEXT

Use Multiple Time Frame Analysis

A currency pair exists on several time frames – the daily, the hourly, the 15-minute, even the 1-minute!

When trading we use what we call multiple time frame analysis. This means you do not use only one time frame to place your trade. You will need to look at the next time frame higher so that you can gain perspective on the general trend and then use the lower time frame to make your entry.

This is because the direction of the trend could be different in each time frame. For example EURUSD could be an uptrend in the daily chart and a downtrend in the 4-hour chart. Using multiple time frame analysis will help you minimize losing trades because you will be able to identify where you are in relation to the bigger picture. There could be a new trend emerging from another time frame than the one you are trading in, and if you don't check it, it could hurt you.



See point B in the figure above, the market is in a downtrend in the 60-minutes after it completed a failure swing. However if you look at the 4-hour chart, you

can see that only the wave is down but the trend is still up. So if you just looked at the 60-minute chart you would have sold at the point where the market would recommence its uptrend.

### How to Analyze The Market

The proper way to analyze any market is to analyze it in at least two time frames. Note that the pair of time frames you use will be related by a ratio of about 1:4. What does this mean?

For example, you would not use a 1 minute time frame to trade and use it with a monthly chart to look at the trend! This is an extreme example but it demonstrates that you should use one time frame above for the trend versus the time frame you are trading in. If you are a long term trader, use the weekly chart to determine the trend, then go down to the Daily chart to trade. A short term trader will use the Daily for the trend and the 4 hour to trade. In our case we use 4-hour charts to analyze the big picture and 60-minute charts to enter our trades. The trades in the direction of the 4-hour trend are more likely to be winners.

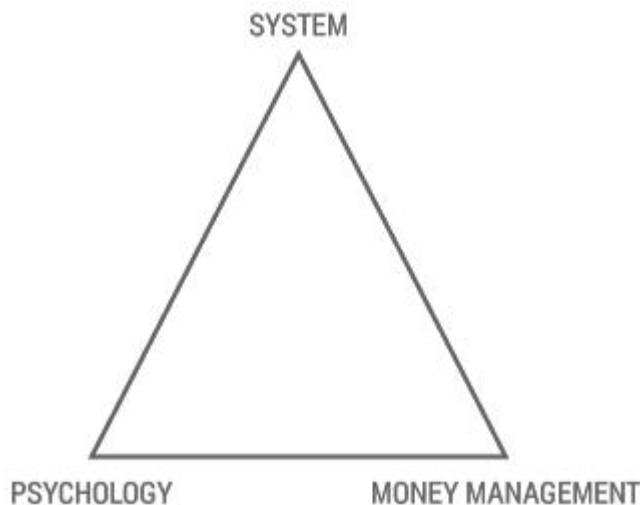
### Forex Education – Chapter 4

### Key Elements of Successful Trading

There are three key principles that you should by all means know about and that can turn you into a winning trader:

- x An efficient trading system

- x Sound money management
- x Proper mental approach



If you have set your mind on becoming a successful trader, you have to acquire an edge over the markets (i.e. trading system), develop a proper mental approach (i.e. psychology), and control risks in your trading account (i.e. money management).

In the previous chapter you could learn how to create your own trading system. It's now time to study the most important elements of trading: money management and trading psychology.

## Money Management

Money management is the most important aspect of trading. Having a sound money management system will make a huge difference in your profits. It will help improve your performance and minimize your losses.

Money management is what can separate you from going broke to becoming a successful trader. Many traders do not realize there is not always a reward in the

market but there is **ALWAYS** risk. Although profits cannot be predicted, the only factor you can control is risk.

Money management basically deals with 3 elements:

- ✗ Choosing the size of your position (position sizing is the calculation of how many lots you should hold in a position).
- ✗ Damage control (this is the amount to risk in each trade (in USD)).
- ✗ Setting your stop loss in pips away from your entry level. Maximum Drawdown

The term drawdown means that your capital is reduced due to losing trades. The more you lose in your account, the harder it is to make it back. Therefore you should only risk a small percentage of your account in each trade, with a maximum of 3%.

Drawdowns on your account are part of trading but if you establish a trading plan then it will enable you to survive these losses and not wipe out your account.

To calculate the drawdown you would usually take the difference between the highest equity value in your account at one time minus the lowest. It is then usually represented as a percentage of your trading account.

Below you can see an example that shows what percentage you would have to make to break even if you were to lose a certain percentage of your account.

LOSS OF CAPITAL	% REQUIRED TO GET BACK BREAKING EVEN
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LOSS OF CAPITAL	% REQUIRED TO GET BACK BREAKING EVEN
5%	5.26%
10%	11.11%
15%	17.65%
20%	25%
25%	33%
30%	43%
40%	67%
50%	100%
60%	150%
70%	233%
80%	400%

LOSS OF CAPITAL %	REQUIRED TO GET BACK BREAKING EVEN
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90%	900%
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You can see that the more you lose, the harder it is to make it back to your original account size. This is the reason that you should do everything you can to protect your account. Therefore, it is best that you only risk a small percentage of your account in each trade so that you can survive your losing streaks and also to avoid a large drawdown in your account.

### Stop Loss

Many people trade without any system that manages their risk. They trade without using a stop loss. A famous professional stock trader by the name of Alexander Elder described trading as being like a high-wire act. In his book entitled Trading for a Living, Elder said You may walk the wire a hundred times without a safety net but the first fall can kill you.

However, you cannot afford to take that chance. You can have a system that is 99% accurate and lose money. You can also have a system that is 1% accurate and make money. Which one do you choose?

### How Much to Risk and When to Stop Trading

The key element of money management is not to be greedy! Before you start trading you have to establish how much you are willing to risk losing in one year, and if you do lose money you have to know when to stop trading so you do not lose more than planned.

Below is an example that shows when you should stop trading based on how much you lose and in what time period.

Amount to Risk in 1 Year	\$9,000
Monthly Stop Loss	Lose \$3,000/month
Daily Stop Loss	Lose \$1,000/day
Stop Loss per trade	Lose \$300/trade

If you lose \$9,000 during the year, stop trading for the rest of the year.  
If you lose \$3,000 during the month, stop trading for the rest of the month.  
If you lose \$1,000 during the day stop trading for the rest of the day.  
Set your Stop loss to \$300 per trade

### Risk-Reward Ratio

Once you have established how much of your capital to risk, it is also good money management to have a reasonable risk to reward ratio per trade. The risk to reward ratio shows how much money you are risking versus the potential reward (or profit) on a trade. While this may seem simplistic, many traders neglect taking this step and often find that they end up with large losses.

A good risk to reward ratio, especially for new traders is 1:3. Any number below 1:2 is too risky. It is best not to enter a trade in which the risk reward ratio is 1:1 or the risk outweighs the reward. There is very little room for smaller price movements and the amount of risk will increase.

Have a look at few examples of risk to reward ratio:

- x If the risk is \$200 and the reward is \$400, then the risk-reward ratio is 1:2 (calculated by 200:400)
- x If the risk is \$500 and the reward it \$1,500, then the risk-reward ratio is 1:3 (500:1500)
- x If the risk is \$1,000 and the reward is \$500, then the risk-reward ratio is 2:1 (or 1000:500)

Now let's assume you are trading EURUSD. You enter at a price of \$1.3000 and you want make a profit of 45 pips so you set your exit level (profit target) at \$1.3045. You set your stop loss at \$1.2985. This is 15 pips below your entry level. This means your risk to reward ratio is 1:3. You are risking 15 pips for a chance to gain 45 pips.

### Position Sizing (Number of Lots)

Choosing the right number of lots will improve your risk-return ratio. In forex trading, position sizing is particularly important since leverage is involved. If you trade too many lots, a string of losses could force you to stop trading. On the other hand, if your position is too small, much of your account equity will sit idle, which will hurt your performance. Finding the right balance is the key to risk management.

### Calculating the Size of Your Position

- x First set the amount you want to risk per trade e.g. USD 1,000.
- x Find the entry level (price). Suppose your system gives you a signal to Buy EURUSD at 1.2950.
- x Determine your stop loss level. This will usually be a few pips below the support level e.g. 1.2900.

- x Use this to calculate the number of pips between the entry and exit levels of your trade.  $1.2950 - 1.2900 = 0.0050$ .
- x The question you have to ask now is: If you put your stop loss 50 pips away how much do you risk for every lot in EURUSD? Since 1 lot is 100,000 base units,  $100,000 * 0.0050 = \text{USD } 500$ .
- x Finally divide your stop loss amount (\$1,000) with this number to give you the amount to trade  $1,000 / 500 = 2$  lots.

### Calculating the Amount to Trade

Stop Loss Per Trade	\$1,000
Entry Level	\$1.2950
Stop Loss level	\$1.2900
Stop Loss in pips	$1.2950 - 1.2900 = 0.0050$
Amount to risk per lot	$100,000 * 0.0050 = \$500$
Amount to Trade	$\$1,000 / \$500 = 2$ lots

### Martingale or Anti-Martingale

Different day traders have developed many different ways to manage their money. Some base their trading strategy on different statistical probability

theories, and some base it on strategies used in casino gambling. Such are the Martingale and anti-Martingale strategies.

In the Martingale method, you decrease the amount of risk after you win a trade and you increase the amount after a loss. The simplest of Martingale strategies was designed for a game in which the gambler wins his stake if a coin comes up heads and loses it if the coin comes up tails. The strategy had the gambler double his bet after every loss, so the first win would recover all previous losses plus win a profit equal to the original stake. Since a gambler with infinite wealth would eventually flip heads, the Martingale betting strategy was seen as a sure thing by those who advocated it. Of course none of the gamblers in fact possessed infinite wealth and the exponential growth of bets would eventually bankrupt those who chose to use the Martingale. Stay away from Martingale strategies!

The alternative method is known as the anti-Martingale method. You increase the number of lots as your profits increase and you decrease the number of lots as your equity drops during a drawdown. When you make a profit it means that the market is trending so increase the amount of your trades to follow the trend.

## Trading Psychology

An essential component of successful trading is psychology. By the term psychology we refer to the state of mind a trader should have while trading. More specifically, trader psychology deals with

- ✗ Control of trader's fear
- ✗ Control of trader's greed
- ✗ Trader's discipline.

## Why We Trade

Trading is a highly exciting activity. The trouble is that it is hardly possible to feel excited and make money at the same time! Think of a casino where amateurs celebrate over free drinks, while professional card counters coldly play game after game, folding most of the time and pressing their advantage when the card count gives them a slight edge over the house.

To be a successful trader, you have to develop iron discipline.

### Psychological Trading Issues and Their Causes

- ✗ Fear of being stopped out or fear of taking a loss: the usual reason for this is that the trader fears failure and feels that he can't take another loss. The trader's ego is at stake;
- ✗ Getting out of trades too early: relieving anxiety by closing a position. Fear of position reversal and as a result, feeling let down. Need for instant gratification;
- ✗ Adding on to a losing position (averaging down): unwilling to admit your trade is wrong and hoping that it will come back. Again, the ego is at stake;
- ✗ Wishing and hoping: not wanting to take control or responsibility for the trade. Inability to accept the current market situation;
- ✗ Compulsive trading: drawn to the excitement of the markets. Presence of addiction and gambling issues. Needing to feel you are in the game;
- ✗ Excessive joy after a winning trade: relating your self-worth to the markets. Feeling unrealistically "in control" of the markets;
- ✗ Limiting profits: feeling that you don't deserve to be successful, to have money, or to make profits. Usually, psychological issues such as poor self-esteem;

- x Not following your proven trading system: you don't really believe it works. You did not test it well. It doesn't match your personality. You want more excitement in trading. You don't trust your ability to choose a successful system;
- x Over-thinking your trade, second-guessing your trading signals: fear of loss or being wrong. Wanting a sure thing where sure things don't exist. Not understanding the fact that loss is part of trading and the outcome of each trade is unknown. Not accepting the fact that trading imposes risks. Not accepting the unknown;
- x Not trading the correct position size: dreaming that the trade will only be profitable. Not fully recognizing the risk and not understanding the importance of money management. Refusing to take responsibility for managing your risk;
- x Trading in excess: need to conquer the market. Greed. Trying to get even with the market for a previous loss. The excitement of trading (similar to compulsive trading);
- x Being afraid to trade: no trading system in place. Not comfortable with risk and the unknown. Fear of total loss. Fear of ridicule. Need for control;
- x Irritable after the trading day: emotional roller coaster caused by anger, fear, and greed. Giving too much attention to trading results and not enough attention to the process itself and to learning the skills of trading. Focusing too much on money. Unrealistic trading expectations;
- x When trading with money you can't afford to lose, or trading with borrowed money: last hope for success. Trying to be successful at something. Fear of losing your chance for the opportunity. No discipline. Greed. Desperation.

These are by no means all the psychological issues – but they are the most common. They usually center on the fact that, for one reason or another, the

trader is not following his chosen trading approach or system but wings it, or trades his own emotions, which is a no go. As you see, psychology in trading is vital.

In terms of psychology, your goal is to be on an even keel, so to speak. Your winning and losing trades should not affect you. Of course, we all trade better when we win, but we should strive to maintain an emotional balance regardless of any gains or losses.

### Accepting Loss

The first reason why traders lose may seem obvious, but in reality it stems from long-term social conditioning: the inability to accept loss. Loss generates powerful emotions such as fear, uncertainty, apprehension, and self-doubt, especially with men.

Men are socially conditioned to succeed from the moment they enter the world. They are brought up to become achievers. Influenced by family, friends, education, and career environment, they are encouraged to seek professions as doctors, lawyers, and bankers. Striving to be right, number one, the breadwinner, and the best, always seeking perfectionism. Men are socially conditioned to be family providers. Moreover, various cultural pressures and demands add up to this, and as a result men have an intrinsic fundamental obligation to succeed.

The solution is to take a reality check. Losing is part of the game. The possibility to lose is always there. Bottom line: traders do lose. The how much and how often is what distinguishes great traders from those who will always struggle.

You can learn how to accept losses by re-defining the meaning of loss. If you equate it with failure, it will sooner or later take its toll, but re-defining it will

help you move forward, improve your trades and cope with possible losses. Consider losing as positive in the sense that it will improve your next trades. Find something new. Make the mistake a blip on the radar, don't over-react, and let it come and go with ease.

### Locked Patterns

The second most important trading challenge is the innate human characteristic of patterns.

Here is an example of a trader with a locked-in pattern:

He keeps making the same mistake when trading. When asked to describe the mistake, he will do so in detail. When he is told not to repeat the same mistake again, he says he can't help it. Although he intellectually knows he should stop making the mistake, he can't. He keeps repeating it and as a result, repeats his losses over and over again, too.

- ✗ You go long and the market immediately goes down.
- ✗ You go short and the market immediately goes up.
- ✗ You start shaking, sweating, get short of breath.
- ✗ You are ready to throw your computer out the window and jump out yourself.
- ✗ And the market has only been open for 30 minutes.
- ✗ What is going on?
- ✗ You are in a trading psychology

### spiral. Breaking a Pattern

Getting up and moving is the fastest way to stop a pattern.

- ✗ Go for a walk and come back.

- x Check if you followed your system.
- x See if your system needs any improvements and apply them.
- x Stick with your system and accept that days like this do happen.
- x Trade smaller amounts until you make profits again.
- x It's important to avoid bad patterns at any cost. Do whatever it takes to break them.

### How to Break a Pattern?

It is critical to notice when the pattern is happening and to never let it take hold. Dealing with the loss immediately will help you to achieve this.

If you have 3 trades that look exactly alike and they are all losing trades, it's imperative that you make it a must to examine them and change your approach. If you don't, the probability of repeating it and losing again is extremely high.

And above all, never forget that a trader must do whatever it takes to stop. Blocked Emotions

Finally, the biggest and most dangerous of the three problems is emotion.

When a trader gets over-emotional about a trade at anytime, he can't think clearly because emotions take control over his common sense. Emotions will cloud judgment, block clear thinking, and therefore prevent the trader from being creative. To sum up, emotions override logical thinking.

This is how you know you're having an emotional block: you want to trade and also react in a certain way but you simply can't, and even though you intellectually know what you want to do, you tend to react differently.

### Locked Emotions

Our emotional strengths and peak mindset are shaped by how and what we think. If we generate bad thoughts, they will affect the overall thinking process – but if we input positive thoughts, the output will also be good.

The best way to exclude emotions is to ask the mind a good question. Such questions force the mind to release emotion, as it shifts to finding the answer to that particular question. Also remember this: should you not be able to control what you are doing, the onset of a strong emotional block is likely. In such cases, you will need additional help to release it.

### Reminiscences of a Stock Operator (1923)

In trading, your biggest enemy is within yourself. Success will only come when you have learned to control your emotions. Edwin Lefèvre's Reminiscences of a Stock Operator (1923) offers advice that applies even today.

- ✗ Caution: Excitement, along with the fear of missing an opportunity, often drives us to enter the market before it is safe to do so. After a down trend a number of rallies may fail before we can carry eventually carry it through. Likewise, the emotional high of a profitable trade may blind us to see the trend reversal.
- ✗ Patience: Before you trade, wait for the right market conditions. At times, it is wise to stay out of the markets and observe it from the sidelines.
- ✗ Conviction: Have the courage to cling to your convictions. Take steps to protect your profits when you see that a trend is weakening, but sit tight and don't let the fear of losing some of your profits cloud your judgment. There is a good chance the trend will resume its upward climb.
- ✗ Detachment: Concentrate on the technical aspects rather than the money. If your trades are technically correct, the profits will follow. Stay emotionally detached from the market. Avoid getting caught up in short-term excitement. Screen watching is a tell-tale sign: if you keep checking the prices or stare at charts for

hours, it's a clear sign of insecurity about your strategy and you are likely to suffer losses.

- ✗ Focus: Focus on the longer time frames and don't try to catch every short-term fluctuation. The most profitable trades are in catching the large trends.
- ✗ Expect the unexpected: Investing involves dealing with probabilities, not certainties. No one can predict the market correctly all the time. Avoid the gambler's logic.
- ✗ Average up, not down: If you increase your position when the price goes against you, you are likely to compound your losses. When the price starts to move, it tends to keep moving in that direction. Increase your exposure when the market proves you right and moves in your favor.
- ✗ Minimize your losses: Use stop-losses to protect your funds. Once the stop-loss is set, don't hesitate but act immediately. The biggest mistake you can make is to hold on to a losing position and hope for recovery. The markets have a habit of declining way below what you anticipate. Eventually, you are forced to sell, decimating your capital.

Human nature being what it is, most traders and investors ignore these rules when they start out for the first time. It can be an expensive lesson, though.

Control your emotions and avoid being swept along with the crowd. Make consistent decisions based on sound technical analysis.

### Be Cool

Markets change, new opportunities arise and the old ones fade away. Good traders are professional but humble people – this is why they keep learning. Speculators get paid for buying what nobody wants, when nobody wants it, and selling what everybody wants, when everybody wants it. Remember that there

is no such thing as a bad trader. On the contrary, there's only well-trained traders or badly trained traders.

## Conclusion

You will be more successful when you learn to control your emotions. These are strong words of advice first offered by trader Edwin Lefevre in his book entitled *Reminiscences of a Stock Operator* in 1923. This book is well worth a read to any trader.

Be cautious, be cool and be patient! Wait for the right conditions in the market before entering it. Sit tight when you are losing, do not let fear grip you, have courage in your convictions. Detach yourself from your emotions at that point and focus on your trading system. It would also help if you detach yourself from your computer screen! If you have placed your stop loss it is not necessary to be constantly watching the screen! This means that you are unsure of yourself.

Don't be afraid to let go of a losing position. Do not add to a losing position! It is best to average up not down. So add on winning positions instead of on losing ones! New opportunities will always arise.

The bottom line is that having the right attitude and the right mindset will make you more successful in trading!

## Forex Education – Chapter 5

### What is Fundamental Analysis?

So far you have learnt that technical analysis examines past market data and predicts future price movements. You also know that there is a relevant time

period between the past and the future: the present. You want to know what moves the market so your boat won't rock and turn upside down.

This is where fundamental analysis comes in! It analyses current social, political and economic factors to indicate future price movements.

### How it Works

Fundamental analysis works by using economic variables that have the highest predictive value for a particular currency pair. In other words, it sets up a prediction model with focus on factors that had the strongest influence on currency pairs over the years.

These hints are derived from forex reports and real-time forex news such as central bankers' speeches, macro-economic news, financial, political and economic press releases.

This is all useful because currency movements and interest rate movements go hand in hand. If you trade, you want to trade well. So you'll be surely following all hints on how interest rates move, in which direction, and how economic data drives currency prices.

Fundamental analysis gives you an overview of the economic conditions that affect the value of a certain currency. Such major indicators are gross domestic product (GDP), retail sales, industrial production, and consumer price index (CPI).

### The Flow of Money

### Major Currencies Rule Forex

Regarding fundamental analysis, the big picture starts with the major currencies that make the world go round.

You already know that in forex there are 8 most commonly traded world currencies. Why not more? Because these are the currencies of the most economically and politically stable economies in the world, like the USA, Japan, and Switzerland.

Thanks to their overall liquidity, the most actively traded currency pairs are the following:

- x EUR/USD
- x USD/JPY
- x GBP/USD
- x EUR/JPY
- x AUD/USD
- x GBP/JPY
- x EUR/CHF
- x USD/CHF
- x USD/CAD
- x EUR/GBP
- x AUD/CAD
- x NZD/USD
- x GBP/CHF
- x CHF/JPY

- x EUR/CAD
- x AUD/JPY
- x EUR/AUD
- x AUD/NZD Price

## Movements

Economic and political events taking place in the countries, whose currency is in demand, influence the upward or downward price movements of that particular currency. This is why you shouldn't only concentrate on a single currency, but follow world events and keep an eye on the global flow of money.

Imagine a Chinese-European scenario. China wants to import products from Germany and Belgium. As China can't use their local currency (yuan) in the eurozone, they must first buy the euro to be able to pay for these products. This will, of course, create greater demand for the euro.

At the same time, there may be a Chinese tycoon, who builds up a factory in Germany, and even starts investing long-term in the German stock market. To do so he must purchase euro. This also adds to the large euro inflow into the German economy, and increases the demand for the euro even more. Since every price in the free economy depends on supply and demand, the euro will rise against yuan.

The more the German, Belgian, and Dutch economies grow, eventually the bigger inflation gets. This means that their products get more expensive. As a result, the European Central Bank will raise interest rates to keep inflation under control. Because of the growing interest rates, more and more investors will start investing in European bonds at increased profits. This will further strengthen the euro against the yuan.

So what does China do after all these changes have happened? Well, they will try to find another country to import from at lower prices. As a result, the flow of money to the eurozone decreases and eventually the euro will fall.

## Volatility and Dynamics

According to this scenario, it seems that there is no stability whatsoever. That is true and that is why the forex market is so dynamic and volatile. As you see, power relations change. If you want to keep a pulse on how money flows and which currencies are getting stronger or weaker, you will use economic indicators to help you decide when and which currency pair to buy or sell.

Are there safe-haven currencies at all? Yes. For instance, the US dollar, the Swiss franc, and the Japanese yen. When there is global economic uncertainty big investors turn to safe destinations. Since the US, Swiss, and Japanese economies are considered the safest, their currencies are going strong.

## Economic Indicators

Economic indicators consist of financial and economic data that allow analysis of economic performance and predict future performance.

Regularly published by governmental agencies and the private sector, economic indicators help market observers follow financial market movements through indices, earning reports and economic summaries.

### How to Benefit from Economic Indicators?

Economic indicators help you consider trades in the context of economic events and understand price actions during these events. You do not need advanced

knowledge of economics to make use of an economic calendar, as not every single data release must be analyzed in-depth.

By following GDP indicators, for instance, or inflation and employment strength, you can anticipate market volatility and identify potential trading opportunities.

You should also know which economic indicators have a greater impact in terms of trading. For example, leading indicators change before the economy starts following a trend – they predict economic changes.

Lagging indicators, on the other hand, change after the economy has already started following a trend – they confirm economic changes.

### Most Important Economic Indicators

Let's see the economic indicators that are most useful to you:

#### GDP (Gross Domestic Product)

It indicates the economic growth of a country, and it's determined by product output, income and expenditure. GDP is often correlated with the living standard. It is the market value of all services and goods produced in a country during a certain time period.

#### Non-farm payroll employment

Monthly report released by the US Department of Labor. It provides statistical data about the current state of the US labor market. It is also used to forecast future levels of economic activity.

#### Unemployment rate

The percentage of unemployed people. It is measured by the ratio of people who are out of work and who are willing and able to work as opposed to the total

number of people in the work force. It is an indicator that changes along with economy (=lagging indicator). It gives you hints about future interest rates and monetary policies.

#### CPI (Consumer Price Index)

Statistical estimate that measures changes in the price of services and consumer goods. CPI is used as a measure of inflation, as it reports price changes in over 200 categories.

#### CCI (Consumer Confidence Index)

Measures consumer confidence (e.g. a drastic decrease in consumer confidence may be a sign of a weakening economy).

#### PMI (Purchasing Managers Index)

Indicates economic activity. It shows the percentage of company/business employees in charge of goods and service acquisition (called purchasing managers) in a particular economic sector. PMI over 50 usually indicates an expanding economy, while anything below 50 indicates economic contraction.

#### Retail Sales

Monthly report that measures consumer expenditure (an essential indicator of GDP in the US). As a timely indicator of broad consumer spending patterns, it can be used to assess the immediate direction of an economy.

#### Average Hourly Earnings

A leading indicator of consumer expenditure. It evaluates the inflation level incurred by all economic sectors (excluding the farming industry) when wages are being paid to employees.

#### IPCU (Industrial Production and Capacity Utilization)

Measures economic activity. It's released by the US Federal Reserve in the form of a monthly report, and it shows data for the previous month about the total amount of US industrial production. The IPCU encourages buying or selling in certain industries.

### Durable Goods Orders

Key indicator of future manufacturing activity.

### ECI (Employment Cost Index)

A quarterly economic series that indicates the rising and falling tendencies in employment costs. It measures inflation in salaries, wages and employer-paid benefits in the US.

### Gross Domestic Product Deflator

A measure of price levels for all goods and services in an economy. The use of the deflator helps to calculate the difference between the nominal and real GDP.

### IP (Industrial Production)

Indicates the changes in output for the industrial sector (e.g. manufacturing, mining). It indicates the industrial capacity of a country.

### IFO (Institute for Economic Research)

A business survey based on the feedback of over 7,000 German business leaders. Based on latest economic data, it provides assessment of the current and upcoming economic climate in Germany and Europe.

### International Trade (Trade Balance)

Measures the difference – imports vs. exports – of all goods and services. Market trends are indicated by changes in imports and exports, together with the level of the international trade balance.

### NAPM Index (National Association of Purchasing Manager)

Measures economy in general, and the manufacturing sector in particular. It sums up the survey of over 250 companies in all US states, and it calculates data on production, new orders, and employment.

### PPI (Producer Price Index)

A frequently used economic indicator that measures the average changes in selling prices received by domestic producers in manufacturing, mining, electric utility, and agriculture.

### Tankan (Short-period Economic Observation)

A quarterly business poll issued by the Bank of Japan on the status of the Japanese economy. It affects the currency rate and stocks significantly, so it's considered a major financial indicator in Japan.

## News Trading

### News Matters

The proverb No news is good news never applies to the forex market. News makes the market move. And very fast!

So far you have learnt about the main economic indicators. How do you know what's going on around the globe? By following current social, political, and economic changes in the countries whose currencies you usually trade (e.g. GDP reports, consumer price index, unemployment figures, interest rates). All these indicate future price movements, and they will be beneficial in the long term.

Additionally, you can be alert to unexpected changes and read important economic news announcements. To gain an advantage over others, many forex traders and investors follow these announcements, and use a technique called news trading. News trading may be beneficial in the short term.

### How News Trading Works

News trading means that you trade a foreign currency right before or after an important economic news announcement has been published. Why? Because after such announcements you can expect market prices to fluctuate, that is, move either up or down. And your aim is, of course, to benefit from these price movements directly.

Any currency pair may move very fast either up or down within just a few minutes before or after an economic news release. Let's say the Federal Bank of the United States has just announced an increase of the interest rate. This means that many traders will invest in the US dollar because its value is likely to increase. This can have quite an impact on the outcome of your trades, can't it?

News has the ability to increase market volatility (price variations) very quickly. But where can I get such news from?, you ask. From online news feeds. Here are the top 7 news sources that can send you updates:

- x Bloomberg
- x Forbes.com Breaking News
- x Reuters Business and Finance
- x BusinessWeek
- x Financial Times
- x CNNMoney

x CNBC

On any given day, you can read economic news announcements on all major currencies (USD, GBP, EUR, JPY, AUD, CHF, CAD, NZD) and currency pairs.

### The Risks

Remember, however, that news trading alone has its risks. The potential profits are huge – but so are the potential losses.

When you news trade, you must take decisions as fast as lightning, otherwise you may end up on the losing side. Stop-loss orders are also quite risky in news trading: due to the sudden and unexpected price fluctuations, the probability of slippage is very high. Slippage occurs during high market volatility caused by news events, and it means that your orders may be executed at a worse price than you expect.

What should I do then?, you ask. Good question! As a beginner trader, don't rely on news trading alone. You will need much more practice to become a professional news trader.

Why did you tell me about it then?, you want to know. Because it's a common technique – but as a beginner, you are not fast enough to cash a fortune by simply reacting to news. There's much more to trading, and pretty soon you will learn about some other techniques that help you earn a steady profit.

### Carry Trades

A carry trade strategy is when a trader sells (i.e. borrows) one currency that is from a country with a relatively low interest rate and then with those funds, a different currency yielding a higher interest rate is purchased.

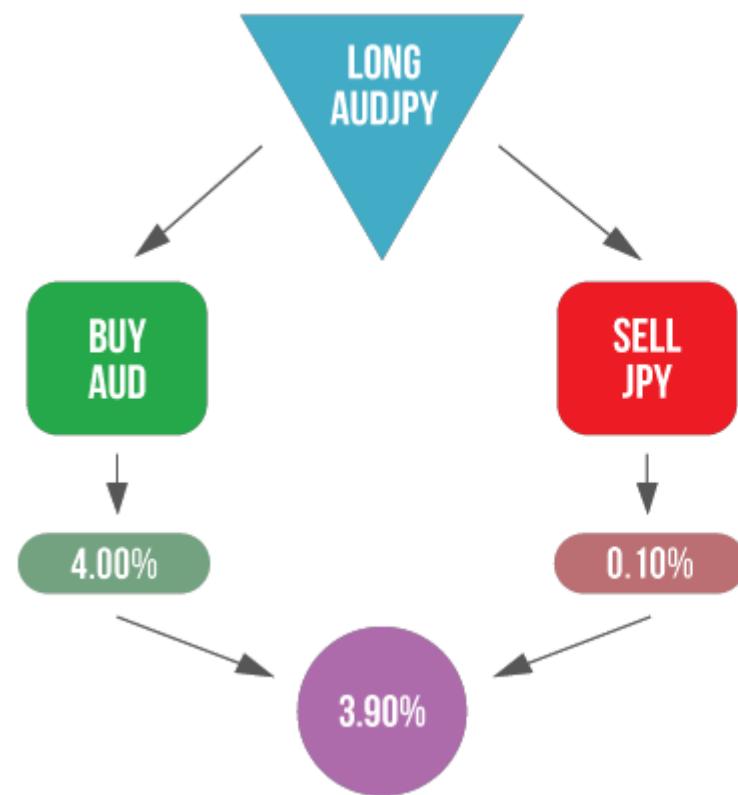
The aim of this strategy is to make profit from the interest rate differential. Sometimes the difference between the rates can be substantial and also adding leverage can really multiply profits.

A common carry trade is for the currency pairs of AUDJPY, NZDJPY, or USDJPY. The main reason is because Japan has kept low interest rates for quite a long time now. Australia and New Zealand have one of the highest interest rates in the developed world! In 2011 interest rates in Australia were as high as 4.5 percent!

### How Carry Trading Works in Forex

Let's assume that you went long on AUDJPY and kept the position open overnight until the next day. Essentially you are buying AUD and selling JPY.

What happens the next day is that your forex broker will either debit or credit you the overnight interest rate difference between the two currencies. This rolling over of your position is known as the carry trade.



Looking at the diagram above, if the interest rate earned on AUD is 4.00 percent and JPY is 0.10 percent, your profit from the interest rate differential is 3.9 percent per year! This is considered a positive carry trade. A negative carry trade happens when you buy JPY and sell AUD, meaning you would end up with a negative interest rate differential.

This example is based on 1:1 leverage and assumes exchange rates remain constant for the whole year.

### Leverage

Now imagine applying leverage. In the example above, if you had a leverage of 100:1, your return would now be  $100 \times 3.9\% = 390\%$  on just the interest rate differential!

### When Are Carry Trades More Successful?

If the central bank in Australia were to raise interest rates, then you would make even more gains. Therefore, you have to be mindful of the economic conditions in Australia. If the Reserve Bank of Australia is optimistic about the economy, then they will likely raise rates.

However, if the economy is sluggish and the RBA believes it needs to lower rates to stimulate the economy, then the AUDJPY as a carry trade would not be that successful. Meanwhile, if the AUDJPY exchange rate moved higher, in addition to higher interest rates, your long position on the pair would gain even more!

### Conclusion

Carry trades work best when risk aversion is low and investors are willing to invest in high yielding (risk) currencies.

## Forex Education – Chapter 6

### United States of America

Currency – US Dollar (USD)



The United States of America is the world's largest economy and so its economy plays a major role in the global markets. Its currency, the US dollar, also known as the greenback, is the most liquid currency in the world and it is used as a reserve currency by many countries. It is deemed to be the King of Currencies.

First of all, you should remember that trading is done in currency pairs. The most actively traded currency pairs include the USD. Take a look at the table below:

CURRENCY PAIR	PERCENTAGE TRADED
EUR/USD	27%
USD/JPY	13%
USD/GBP	12%

CURRENCY PAIR	PERCENTAGE TRADED
USD/AUD	6%
USD/CHF	5%
USD/CAD	4%
USD/SEK	2%
USD/Other	19%

One reason why the USD is so liquid is because the US houses the largest stock exchange in the world, the New York Stock Exchange, where the value of the companies listed amount to over \$28 trillion, almost 80 percent of the global stock market.

Also, the US bond market makes up around \$31 trillion of the \$82 trillion value of the global bond market. During one trading session alone, the dollar could take up over 90 percent of all the currency transactions.

### Reserve Currency

The US dollar accounts for over 63% of the world's currency reserves, meaning that the central banks of many countries hold USD.

The main reason for holding a currency that is deemed to be highly regarded and credible is for trade and borrowing purposes. Another reason a country holds the dollar as a reserve currency is to peg the value of their currency to the

USD. An example of a country that does this is China. Other countries maintain a loose peg to the USD.

The advantage of pegging to the dollar is so that these countries can either stabilize their own currencies and therefore their economies and/or to hold the value of their currencies artificially low in order to make their goods more competitive overseas.

Apart from governments (central banks), many non-US based private businesses and individuals hold US dollars primarily for trade reasons. This is especially common in countries where the local currency is not as stable.

In addition to the USD being part of a currency pair, it is also traded against many commodities such as gold, silver, oil, copper, etc. Many major commodities are priced in US dollars, which means that access to US dollars is crucial for anyone in the world who wants to purchase these products.

All of the factors we have mentioned above make the US dollar an important currency and is therefore incredibly important for traders.

### Currency Fundamentals

The US dollar is affected by particular economic releases, which can have a large impact on the value of the currency depending on the state of the economy. For example, if there are fears that the US economy may be going into recession, then the market is going to be more sensitive to any economic data, such as non-farm payrolls and consumer spending, which may provide early warning signs that this is the case of a slowing economy.

On the other hand, if the economy is growing and the markets are concerned that inflation may become a problem, then the type of economic news announcements which cause the market to move may be price data releases, such as the CPI (Consumer Price Index) and the PPI (Producer Price Index).

## Most Important Economic Indicators to Follow

The economic indicators below are considered by many economists to be the most market moving indicators in regards to the US dollar:

### Non-farm Payrolls (NFP)

Shows the change in the number of employed people during the month reported, not including employment in the farming industry.

### Retail Sales

The total value of sales at the retail level. It is important because it is a good indicator for the level of consumer spending, which accounts for the majority of overall economic activity in the US.

### University of Michigan Consumer Sentiment

A survey conducted on businesses to rate the relative level of current and future economic conditions.

### Personal Spending

It measures the change in the inflation-adjusted value of consumer spending.

### Consumer Price Index (CPI)

It is the measure of the change in the price of goods and services purchased by consumers, excluding food and energy.

### Gross Domestic Product (GDP)

It gives the annualized change in the inflation-adjusted value of all goods and services produced by the US economy.

ISM Manufacturing PMI: a survey of purchasing managers in the manufacturing industry, who are asked to rate the relative level of business

Conditions including employment, production, new orders, prices, supplier deliveries, and inventories.

### New Home Sales

The annualized number of new single-family homes sold during the month reported.

### Federal Reserve Policy Announcements

Apart from economic data, it is important to also watch the Federal Reserve policy. The Federal Open Market Committee (FOMC) issues a statement after each policy meeting. If it is more hawkish than expected, this is usually good for USD.

For example, if the Fed is expected to raise interest rates, this means that demand for dollar-denominated financial assets (such as US Treasuries) could rise, which would have a positive effect on the USD. On the contrary, if the Fed is expected to cut interest rates, it could lessen demand for dollar-denominated assets and this would have a negative effect on the USD as investors would likely move their funds away from this currency.

Adopting more quantitative easing measures (QE) to stimulate the economy usually tends to weaken the dollar because this measure involves printing more money.

## Eurozone

Currency- Euro (EUR)



The European Union (EU) is made up of 27 member states, but only 17 of these nations use the single currency, known as the euro. These countries using the euro make up the eurozone: Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain.

The history of the euro is something that traders must be aware of in order to have a complete understanding of the fundamentals of the currency.

### Historical Origins of the Euro

Before the EU as we know it today was formed, a group of only six countries – France, West Germany, Italy, Belgium, The Netherlands and Luxembourg – formed the European Coal and Steel Community (ECSC) at the end of the Second World War. The ECSC would set the framework of how the EU would later work. It basically went on to form the Common Market, known as the European Economic Community (EEC), which was the predecessor to the EU.

The main goals of the European Coal and Steel Community and later the Common Market, were to lower trade barriers and promote economic cooperation between the member nations.

The most important event that eventually followed was the ratification of the Maastricht Treaty in the 1990's. With this treaty, member states shifted from straightforward economic collaboration, to the much more ambitious goal of political integration between member nations. It was in the Maastricht Treaty where the basic fundamentals of the euro were outlined. Some of the steps needed to be completed before the single currency could be released were

the coordination of economic policies and free circulation of capital among member states.

In 1999 the European Central Bank (ECB) was established and upon the introduction of the euro, monetary policy would be set by the ECB and the member states would be bound by this. The ECB's main aim is to maintain price stability.

The following 11 countries began to use the euro: Germany, France, Spain, Portugal, Italy, Belgium, the Netherlands, Luxembourg, Austria, Ireland and Finland. These countries formed what is known as the European Monetary Union, which is made up of countries who are members of the European Union, and now use the euro as their currency. Later other countries also joined the monetary union: Greece, Cyprus, Malta, Slovakia, Slovenia and Estonia.

## Currency Fundamentals

As you have seen, 17 countries make up the eurozone. However, when it comes to economic indicators, not every country's data will have a huge impact on the euro.

It is logical to say that the biggest economies of the euro area will have the most impact on the value of the single currency. One of the most important country's to follow is Germany, which is of course the largest economy in the eurozone and is perceived as the region's powerhouse.

The next biggest economies are France, Italy and Spain. Over 75 percent of the eurozone's GDP is accounted for by these four largest economies. Due to this fact, economic data out of these countries has a tendency to move the euro the most, so traders naturally pay the most attention to these.

Of all the economic data released in the eurozone, the ones that affect the current account (trade flows) or interest rates (capital flows) will be those that have the greatest potential to move the currency.

### Economic Indicators

The following are the most closely watched economic indicators that could affect the euro:

#### Gross Domestic Product (GDP)

It measures economic growth in the euro-region. Note that Germany's GDP is more closely watched since it is the largest economy in the eurozone and its GDP tends to move the currency the most.

#### German Industrial Production

It measures German industrial activity, again important because of Germany being seen as the powerhouse of Europe.

#### German IFO Business Climate Survey

A report that gauges the current as well as future business conditions in Germany.

#### Consumer Price Index (CPI)

An important indicator on inflation. This should be watched in conjunction with the European Central Bank inflation target. If inflation is higher, or even lower than the target, then the central bank could change monetary policy accordingly, and this will have an effect on the euro.

#### Employment Change

The euro is particularly sensitive to changes in employment numbers in Germany, which is the eurozone's largest economy.

## European Central Bank Policy Announcements

The European Central Bank sets fiscal and monetary policy in the eurozone. It is located in Frankfurt, Germany. It is helpful to watch policy meetings and announcements on interest rate decisions. When interest rates are lowered, the euro will likely weaken, and vice versa.

## United Kingdom

Currency – British Pound (GBP)



The United Kingdom is a member of the European Union but not part of the eurozone. Therefore it does not use the Euro but uses its own currency, which is the British pound, also known as sterling.

The UK is the third largest economy in Europe after Germany and France. London is a major financial center so therefore the British pound is considered to be a very liquid currency. The GBP/USD is a very actively traded currency pair. The GBP is also very active in the crosses. Since the EU is the UK's largest trading partner, traders take a particular interest in any movements in the EUR/GBP for pointers on the fundamental direction of the currency.

## Important Economic Indicators to Follow

Purchasing Managers Index (PMI)

A good indicator of business conditions since it is a survey of business managers. A number above 50 indicates expansion, while below 50 shows contraction.

It should also be taken into account that the UK economy is a service based economy, so any changes in service sector PMI data (Purchasing Managers Index) has an effect on the value of the currency.

#### Gross Domestic Product (GDP)

A good indication of the state of the UK economy, showing whether there is growth or contraction.

#### Unemployment Rate

A good indicator of future spending in the economy, which usually helps an economy grow.

#### Gfk Consumer Confidence report

It measures consumer confidence about current and future economic conditions in the UK and is a good indicator of future consumer spending, which is healthy for economic growth.

#### Consumer Price Index (CPI)

The change in prices of consumer goods is a good measure of inflation which the Bank of England will closely watch in order to set monetary policy.

#### Bank of England Policy Announcements

The Bank of England (BOE) sets fiscal and monetary policy in the UK. If the central bank raises the benchmark interest rate, this will tend to lift the British pound. On the other hand, if rates are cut, this will usually weaken the pound.

If the BOE needs to undertake monetary policy changes to stimulate the economy, they will adopt quantitative easing measures and inject more money into the system by increasing bond purchases. This tends to weaken the pound.

## Currency – Japanese Yen (JPY)



The Japanese economy is the third largest in the world. Japan is heavily reliant on exports in order to support its economy, since it does not have many natural resources.

After being heavily destroyed in World War Two, Japan focused on rebuilding its industries rather than focusing on building military strength as it did before the war. As a result the nation was able to surpass pre-war production levels by 1950. Japan proved very competitive on the international stage in the following decades, and its economic growth in the 60's, 70's, and 80's was incredibly impressive.

Japan's industrial sector expanded and exports grew at a fast pace, creating a strong economy with the help of easy access to credit through low interest rates. The Bank of Japan lowered interest rates from over 6 percent in 1990 to as low as zero percent in 1999 and they have recently been ranging between zero and 0.10 percent.

### Carry Trade

Low interest rates made the yen become very attractive to investors. As a result, the Japanese currency is one of the best candidate for carry trades, especially

against the Australian dollar. We have already seen how carry trades work. The low interest rates in Japan and higher rates in Australia, provide a good interest rate differential.

### Importance of the Bank of Japan

Japan exports mainly automobiles, auto parts, iron and steel products, semiconductors. Exports with the rest of the world in 2012 amounted to over \$801 billion. Due to the fact that Japan relies heavily on exports to support its economic growth, it is not beneficial for the nation to have a very strong currency as it would make its exports more expensive to other countries.

That is why the Bank of Japan is known for intervening in the currency markets, and has done so in the past. This is because if it thinks the yen has appreciated too much, it would intervene to weaken its value. So one way to keep the value of yen low is to keep interest rates low.

One important thing to also know about the yen is that it is perceived to be a safe haven currency, meaning that in times of financial market stress, investors tend to rush to the safety of the Japanese currency. This increase in demand for the yen will tend to increase its value. Again in such a case, the Bank of Japan will closely watch the yen to make sure it does not appreciate too much.

Based on this, it is important to watch policy decisions by the Bank of Japan.

### Economic Indicators to Follow

#### Trade Balance

Since Japan is heavily export dependent, this is an important indicator to watch. Falling export numbers indicate a decline in economic activity. This is negative for yen.

#### Gross Domestic Product

It indicates whether economic activity in Japan has expanded or contracted.

### Tankan Survey

A survey of managers from large Japanese industries, who are asked to give their views on the economy. A number above zero indicates rising meaning that Japanese businessmen expect business activity to pick up. This is positive for yen.

### Consumer Price Index (CPI)

Depending on the rate of inflation, the Bank of Japan will undertake monetary policy. If the central bank needs to fight deflation, it will adopt easier monetary policy, which has a weakening effect on the yen.

### Core Machinery Orders

Since the Japanese economy is mostly comprised of manufacturing, a large proportion of exports are made up of machinery orders. An increase in core machinery orders is therefore negative for yen.

### Unemployment Rate

As with other countries, high unemployment could lead to a decline in consumer spending which will have a negative effect on economic growth.

## Australia

### Currency – Australian Dollar (AUD)



Australia is a member of the G7 and has a rich economy due to a large mining sector. Therefore, the Australian dollar, also known as the “Aussie”, is commodity-price sensitive since the country produces ores and metals, as well as wool and live animals.

Since Australia is the third largest gold producer, the Aussie is affected by gold prices. For example, if the price of gold rises, the AUD will rise as well.

### Carry Trade

The Aussie is a good candidate for carry trades because Australia has higher interest rates than Japan who has one of the lowest rates in the world. This interest rate differential will be good for increasing your profit when trading this currency pair.

### Economic Indicators to Follow

#### Balance of Trade

Watching changes in the country’s export and import levels will have an effect on the Aussie since Australia has an extremely robust trade sector.

#### Gross Domestic Product

An increase in GDP will be positive for the Aussie.

#### Unemployment Rate

Watching the unemployment rate will give an indication of future economic activity and consumer spending. If more people are out of work, they will spend less and this is negative for the economy, and consequently negative on the AUD.

## China's Economy

The Aussie is also affected by the state of China's economy because China is an important trading partner and export market for Australia. As a result, positive data from China will be good for the Aussie.

## New Zealand's Economy

The state of the New Zealand economy also has an effect on the Aussie, though to a lesser extent. New Zealand is also a major trading partner for Australia.

## Switzerland

Currency – Swiss Franc (CHF)



Switzerland enjoys the status of being one of the richest countries in the world. The Swiss Franc is sometimes called the Swissie.

Switzerland's economic stability and reputation for high quality financial institutions makes its currency, the Swiss Franc, very desirable. The nation also holds an excellent reputation for being a safe haven due to the fact that it has steered clear of global conflicts and did not participate in any of the two world wars. As a result, money flows into the CHF during times of economic or geopolitical uncertainty.

In March 2001, Switzerland rejected accession to the EU despite the fact that its economic policies and practices are generally in line with those of the EU. Despite the fact that its safe haven status has fallen somewhat recently due to

the Swiss National Bank intervening in the currency markets in 2011, the Swiss Franc for the time being remains one of the most actively traded currencies.

### Swiss National Bank and EURCHF

At the height of the eurozone debt crisis, the Swiss Franc appreciated rapidly due to safe haven demand, prompting the Swiss National Bank (SNB) to intervene in the currency markets on the 6th September 2011 and set a floor on the EURCHF exchange rate, at 1.20 Francs. This meant that the exchange rate could not fall below this set rate otherwise the SNB would be willing to intervene by selling Swiss Francs and buying up Euros in unlimited quantities.

The current massive overvaluation of the Swiss Franc poses an acute threat to the Swiss economy and carries the risk of a deflationary development, said the SNB in a statement following the announcement of the rate cap. Since then, EURCHF traded above 1.20 CHF and has even risen to 1.23 CHF. It is not known how long the SNB will keep the peg in place but as long as the eurozone crisis is ongoing, the 1.20 CHF floor will likely remain in place.

### Correlation with Euro

Another important factor for traders to note with regards to the Swiss Franc is its strong correlation with the euro. The USDCHF currency pair has a negative correlation with the EURUSD currency pair. This means that if EURUSD is falling, USDCHF is likely to be rising.

It is helpful to understand this strong negative correlation and to take it into account when considering trades in both currency pairs. As both currency pairs have such a high negative correlation, there is a very good chance that if a trader's technical analysis will lead to a buy signal in the EURUSD, it could at the same time lead to a sell signal for USDCHF, or vice versa.

If traders were unaware of the negative correlation we have just described, they may think that they are placing two completely different trades. If these pairs were traded in the same manner, they would effectively be decreasing the effect of both trades, as the negative correlation between the two currency pairs would offset any gains or losses that were achieved on each trade.

Remember that this negative correlation can at times break down depending on the Swiss political and/or economic environment and if it begins to substantially deviate from that of the eurozone. The reason for the correlation of the Swiss Franc with the Euro is due to strong economic links between Switzerland and the European Union.