

INTRODUCTION TO FOREIGN EXCHANGE

The foreign exchange (also known as the currency, forex or FX) market exists wherever one currency is traded for another. It is the largest and most liquid financial market in the world and includes trading between large banks, central banks, currency speculators, multinational corporations, governments, and other financial markets and institutions. The average daily trade in the Global Forex and related markets is currently almost US\$ 4 trillion.

MARKET SIZE AND LIQUIDITY

The foreign exchange market is unique because of:

- Its trading volumes;
- The extreme liquidity of the market;
- The large number of and variety of, traders in the market;
- Its geographical dispersion;
- Its long trading hours: 24 hours a day except on weekends (from 3pm EST on Sunday until 4pm EST Friday);
- The variety of factors that affect exchange rates;
- The use of leverage.

The FX market has been referred to as the market closest to the ideal perfect competition, notwithstanding market manipulation by central banks. According to the BIS, average daily turnover in global foreign exchange markets is estimated at \$3.98 trillion. Trading in the world's main financial markets accounted for \$3.21 trillion of this.

Of the \$3.98 trillion daily global turnover, trading in London accounted for around \$1.36 trillion, or 34.1% of the total, making London by far the global center for foreign exchange. In second and third places respectively, trading in New York accounted for 16.6%, and Tokyo accounted for 6.0%.

Foreign exchange trading increased by 38% between April 2005 and April 2006 and has more than doubled since 2001. This is largely due to the growing importance of foreign exchange as an asset class and an increase in fund management assets, particularly of hedge funds and pension funds. The diverse selection of execution venues such as internet trading platforms, have made it easier for retail traders to trade in the foreign exchange market.

Because foreign exchange is an OTC (Over The Counter) market where brokers/dealers negotiate directly with one another, there is no central exchange or clearing house. The biggest geographic

trading centre is the UK, primarily London, which according to IFSL estimates has increased its share of global turnover in traditional transactions from 31.3% in April 2004 to 34.1% in April 2007.

THE COST OF A TRADE

Trading in the FX market is 'commission free', but it is not free to trade. Instead of your broker charging you a commission, you pay a spread, i.e. Pips (points). This means that you give away a number of Pips per trade to the Broker.

The Bid/Ask Spread is the difference between the price at which a bank or market maker will sell ("ask", or "offer") and the price at which a market-maker will buy ("bid") from a wholesale customer. This spread is minimal for actively traded pairs of currencies, usually 3 Pips. For example, the bid/ask quote of EUR/USD might be 1.2200/1.2203 on a retail broker. Minimum trading size for most deals is usually 100,000 units of currency, which is a standard "lot".

These spreads might not apply to retail customers at banks, which will routinely mark up the difference. Spot prices at market makers vary but on EUR/USD are usually no more than 3 pips wide (i.e. 0.0003).

COMMERCIAL COMPANIES

An important part of this market comes from the financial activities of companies seeking foreign exchange to pay for goods or services. Commercial companies often Your Trading Room Training Manual

trade fairly small amounts compared to those of banks or speculators, and their trades often have little short term impact on market rates. Nevertheless, trade flows are an important factor in the long-term direction of a currency's exchange rate. Some multinational companies can have an unpredictable impact when very large positions are covered due to exposures that are not widely known by other market participants.

CENTRAL BANKS

National central banks play an important role in the foreign exchange markets. They try to control the money supply, inflation and/or interest rates, and often have official or unofficial target rates for their currencies. They can use their often substantial foreign exchange reserves to stabilize the market. The mere expectation or rumor of central bank intervention might be enough to stabilize a currency but aggressive intervention might be used several times each year in countries with a dirty float currency regime.

Central banks do not always achieve their objectives. The combined resources of the market can easily overwhelm any central bank. Several scenarios of this nature were seen in the 1992–93 ERM collapse and in more recent times in Southeast Asia.

HEDGE FUNDS

Hedge Funds have gained a reputation for aggressive currency speculation since 1996. They control billions of dollars of equity and may borrow billions more, and thus may overwhelm intervention by central banks to support almost any currency, if the economic fundamentals are in the hedge funds' favor.

INVESTMENT MANAGEMENT FIRMS

Investment management firms (who typically manage large accounts on behalf of customers such as pension funds and endowments) use the foreign exchange market to facilitate transactions in foreign securities. For example, an investment manager bearing an international equity portfolio needs to purchase and sell several pairs of foreign currencies to pay for foreign securities purchases.

RETAIL FOREX BROKERS

There are two types of retail brokers offering the opportunity for speculative trading. Retail forex brokers or market makers. Retail traders (individuals) are a small fraction of this market and may only participate indirectly through brokers or banks.

The main trading center is London but New York, Tokyo, Hong Kong and Singapore are all important centers as well. Banks throughout the world participate. Currency trading happens continuously throughout the day; as the Asian trading session ends, the European session begins, followed by the North American session and then back to the Asian session, excluding weekends.

MOST TRADED CURRENCIES

Currency distribution of reported FX market turnover (April 2007)

Rank	Currency ISO 4217 code	(Symbol)	% daily share
1	United States dollar	USD (\$)	86.3%
2	Euro	EUR (€)	37.0%
3	Japanese yen	JPY (¥)	16.5%
4	Pound sterling	GBP (£)	15.0%
5	Swiss Franc	CHF (Fr)	6.8%
6	Australian dollar	AUD (\$)	6.7%
7	Canadian dollar	CAD (\$)	4.2%
8-9	Swedish krona	SEK (kr)	2.8%
8-9	Hong Kong dollar	HKD (\$)	2.8%
10	Norwegian krone	NOK (kr)	2.2%
11	New Zealand dollar	NZD(\$)	1.9%
12	Mexican Peso	MEX (\$)	1.3%
	Other		16.8%
	Total		200%

There is little or no 'inside information' in the foreign exchange markets. Exchange rate fluctuations are usually caused by actual monetary flows as well as by expectations of changes in monetary flows caused by changes in GDP growth, inflation, interest rates, budget and trade deficits or surpluses, large cross-border M&A deals and other macroeconomic conditions. Major news is released publicly, often on scheduled dates, so many people have access to the same news at the same time. However, the large banks have an important advantage, they can see their customers' order flow.

Currencies are traded against one another. Each pair of currencies constitutes an individual product and is traditionally noted XXX/YYY, where YYY is the ISO 4217 international three letter code of the currency into which the price of one unit of XXX is expressed (called base currency). For instance, EUR/USD is the price of the euro expressed in US dollars as in 1 euro = 1.5465 dollar. Out of convention, the first currency in the pair, the base currency, was the stronger currency at the creation

of the pair. The second currency, counter currency, was the weaker currency at the creation of the pair. The factors affecting XXX will affect both XXX/YYY and XXX/ZZZ. This causes positive currency correlation between XXX/YYY and XXX/ZZZ.

The most heavily trade products on the spot market, according to the BIS study were:

- EUR/USD: 27 %
- USD/JPY: 13 %
- GBP/USD: 12 %

FACTORS AFFECTING CURRENCY TRADING

Although exchange rates are affected by many factors, in the end, currency prices are a result of supply and demand forces. The world's currency markets can be viewed as a huge melting pot, in a large and ever-changing mix of current events, supply and demand factors are constantly shifting, and the price of one currency in relation to another shifts accordingly. No other market encompasses (and distills) as much of what is going on in the World at any given time as foreign exchange.

Supply and demand for any given currency, and thus its value, are not influenced by any single element, but rather by several. These elements generally fall into three categories: Economic factors; Political conditions and Market Psychology.

ECONOMIC FACTORS

These include economic policy, disseminated by government agencies and central banks economic conditions, generally revealed through economic reports and other economic indicators.

Economic policy comprises government fiscal policy (budget/spending practices) and monetary policy (the means by which a government's central bank influences the supply and "cost" of money, which is reflected by the level of interest rates).

Economic conditions include:

Government budget deficits or surpluses: The market usually reacts negatively to widening government budget deficits and positively to narrowing budget deficits. The impact is reflected in the value of a country's currency.

Balance of trade levels and trends: The trade flow between countries illustrates the demand for goods and services, which in turn indicates demand for a country's currency to conduct trade. Surpluses and deficits in trade of goods and services reflect the competitiveness of a nation's economy. For example, trade deficits may have a negative impact on a nation's currency.

Inflation levels and trends: Typically, a currency will lose value if there is a high level of inflation in the country or if inflation levels are perceived to be rising. This is because inflation erodes purchasing power thus demand, for that particular currency.

However, a currency may sometimes strengthen when inflation rises because of expectations that the central bank will raise short-term interest rates to combat rising inflation.

Economic growth and health: Reports such as gross domestic product (GDP), employment levels, retail sales, capacity utilization and others, detail the levels of a country's economic growth and

health. Generally, the more healthy and robust a country's economy, the better its currency will perform, and the more demand for it there will be.

POLITICAL CONDITIONS

Internal, regional, and international political conditions and events can have a profound effect on currency markets.

For instance, political upheaval and instability can have a negative impact on a nation's economy. The rise of a political faction that is perceived to be fiscally responsible can have the opposite effect. Also, events in one country in a region may spur positive or negative interest in a neighboring country and, in the process, affect its currency.

MARKET PSYCHOLOGY

Market psychology and trader perceptions influence the foreign exchange market in a variety of ways:

Flights to quality: Unsettling international events can lead to a flight of quality with investors seeking a safe haven. There will be a greater demand, thus a higher price, for currencies perceived as stronger over their relatively weaker counterparts. The Swiss Franc has been a traditional safe haven during times of political or economic uncertainty.

Long-term trends: Currency markets often move in visible long-term trends. Although currencies do not have an annual growing season like physical commodities, business cycles do make themselves felt. Cycle analysis looks at longer term price trends that may rise from economic or political trends.

"Buy the rumor, sell the fact:" This market truism can apply to many currency situations. It is the tendency for the price of a currency to reflect the impact of a particular action before it occurs and when the anticipated event comes to pass, react in exactly the opposite direction. This may also be referred to as a market being "oversold" or "overbought". To buy the rumor or sell the fact can also be an example of the cognitive bias known as anchoring when investors focus too much on the relevance of outside events to currency prices.

Economic numbers: While economic numbers certainly reflect economic policy, some reports and numbers take on a talisman-like effect - the number itself becomes important to market psychology and may have an immediate impact on short-term market moves. "What to watch" can change over time.

Technical trading considerations: As in other markets, the accumulated price movements in a currency pair such as EUR/USD can form apparent patterns that traders may attempt to use. Many traders study price charts in order to identify such patterns.

FINANCIAL INSTRUMENTS

Spot, Forward, Future, Swap, Option, Exchange Traded Fund

The spot exchange rate refers to the current exchange rate. The forward exchange rate refers to an exchange rate that is quoted and traded today but for delivery and payment on a specific future date.

The Spot has the largest share by volume in FX transactions among all instruments and is the instrument most commonly traded by day traders.

A Spot transaction is a two-day delivery transaction (except in the case of the Canadian dollar, which settles the next day), as opposed to the futures contracts which are usually three months. This trade represents a "direct exchange" between two currencies, has the shortest time frame, involves cash rather than a contract; and interest is not included in the agreed-upon transaction. The data for this study come from the spot market. .

Speculation

Controversy about currency speculators and their effect on currency devaluations and national economies recurs regularly. Nevertheless, economists have argued that speculators ultimately are a stabilizing influence on the market and perform the important function of providing a market for hedgers and transferring risk from those people who don't wish to bear it, to those who do.

Currency speculation is considered a highly suspect activity in many countries. For example, in 1992, currency speculation forced the Central Bank of Sweden to raise interest rates for a few days to 500% per annum, and later to devalue the krona. A former Malaysian Prime Minister is one well known proponent of this view, he blamed the devaluation of the Malaysian Ringgit in 1997 on George Soros and other speculators.

High Leverage

The idea of margin (leverage) and floating loss is another important trading concept and is perhaps best understood using an example. Most retail Forex market makers permit 100:1 leverage, but also, crucially, require you to have a certain amount of money in your account to protect against a critical loss point. For example, if a \$100,000 position is held in EUR/USD on 100:1 leverage, the trader has to put up \$1,000 to control the position. However, in the event of a declining value of your positions, Forex market makers, mindful of the fast nature of forex price swings and the amplifying effect of leverage, typically do not allow their traders to go negative and make up the difference at a later date.

In order to make sure the trader does not lose more money than is held in the account, forex market makers typically employ automatic systems to close out positions when clients run out of margin (the amount of money in their account not tied to a position). If the trader has \$2,000 in his account, and he is buying a \$100,000 lot of EUR/USD, he has \$1,000 of his \$2,000 tied up in margin, with \$1,000 left to allow his position to fluctuate downward without being closed out.

Typically a trader's trading platform will show him three important numbers associated with his account: his balance, his equity, and his margin remaining. If trader X has two positions: \$100,000 long (buy) in EUR/USD, and \$100,000 short (sell) in GBP/USD, and he has \$10,000 in his account, his positions would look as follows: Because of the 100:1 leverage, it took him \$1,000 to control each position.

This means that he has used up \$2,000 in his margin, out of a \$10,000 account, and thus he has \$8,000 of margin still available. With this margin, he can either take more positions or keep the margin relatively high to allow his current positions to be maintained in the event of downturns. If the client chooses to open a new position of \$100,000, this will again take another \$1,000 of his margin, leaving \$7,000. He will have used up \$3,000 in margin among the three positions. The other way margin will decrease is if the positions he currently has open lose money. If his 3 positions of \$100,000 decrease by \$5,000 in value (which is fairly common), he now has, of his original \$7,000 in margin, only \$2,000 left.

If you have a \$10,000 account and only open one \$100,000 position, this has committed only \$1,000 of your money plus you must maintain \$1,000 in margin. While this leaves \$9,000 free in your account, it is possible to lose almost all of it if the speculation loses money.

Transaction Costs and Market Makers

Market makers are compensated for allowing clients to enter the market. They take part or all of the spread in all currency pairs traded. In a common example, EUR/USD, the spread is typically 3 pips (3/100 of a cent). Thus prices are quoted with both bid and offer prices (e.g., Buy EUR/USD 1.4900, Sell EUR/USD 1.4903).

That difference of 3 pips is the spread and can amount to a significant amount of money. Because the typical standard lot is 100,000 units of the base currency, those 3 pips on EUR/USD translate to \$30 paid by the client to the market maker. However, a pip is not always \$10. A pip is 1/100th of a cent (or whatever), and the currency pairs are always purchased by buying 100,000 of the base currency.

For the pair EUR/USD, the quote currency is USD; thus, 1/100th of a cent on a pair with USD as the quote currency will always have a pip of \$10. If, on the other hand, your currency pair has Swiss francs (CHF) as a quote instead of USD, then 1/100th of a cent is now worth around \$9, because you are buying 100,000 of whatever in Swiss francs.

FX TERMS

What is the Forex Market?

The online trading environment for foreign exchange encompasses the largest, most dynamic capital market in the world with more than \$1.5 trillion traded daily. The FX market is a continuous, 24/5 marketplace open from Sunday afternoon (4 PM EDT) through the close of the US markets on Friday (5 PM EDT). The FX market is where investors can trade one currency against another currency.

What is a Currency Cross?

Currencies are always priced in pairs. All trades take place between two different currencies resulting in the concurrent purchase of one currency and sale of another. For example, when you trade EUR/USD, the currency cross is Euros versus US dollars. One currency will be bought (long position) while the other currency is sold (short position).

What is the Bid-Ask Spread?

The bid-ask spread is the buying and selling spread between two currencies. The bid price is the price at which the currency is sold. The ask price is the price at which the currency is bought. The difference between the bid price and the ask price is known as the bid-ask spread. The bid-ask spread differs between currency crosses with more common crosses (majors) having tighter spreads.

WHAT IS A PIP (POINT)?

Defining a Pip

Currencies are quoted using 5 significant digits. The last digit, called a "pip", represents the smallest potential move in an exchange rate, and is very similar to ticks or points in other financial products. For example, if the currency was trading at 1.2277, a 10 pip increase in the Ask price would result in a quote of 1.2287. Likewise, a 10 pip decrease in the Ask price would result in a quote of 1.2267. Half-

pips are a more recent development offering traders even tighter spreads and more competitive and transparent accuracy in pricing. When trading foreign exchange, the value of a pip is dependent on two variables – the amount of currency and the currency pair.

USD Value of a Pip

Below, we have calculated the US Dollar value of a 1 pip movement for some of the more frequently traded currency pairs. Please note in the below example, all values are calculated using 100,000 units of the base currency (the left-hand currency in the pair).

- EUR/USD = \$10.00
- USD/CHF = \$8.00
- USD/JPY = \$9.06
- GBP/USD = \$10.00
- USD/CAD = \$7.92
- AUD/USD = \$10.00
- EUR/CHF = \$8.00
- EUR/JPY = \$9.06
- EUR/GBP = \$17.98

TYPES OF FX TRADES

What is Spot?

A spot FX trade is an immediate execution of one currency against another at an agreed rate, settlement of which traditionally takes place two business days later. Client Station offers spot trading on streaming real-time prices for over 120 different currency crosses, with deep liquidity on the most liquid currency pairs.

In the FX Trade module, if the Bid/Ask fields are highlighted green, then the platform is delivering a live-tradable price. To execute the spot trade simply click the 'Enable' button to buy or sell the currency immediately.

What is a Forward Outright?

A Forward Outright is a trade that will commence at an agreed upon date (in the future). There is no centralized exchange for Forwards and forward trading is often customized to meet the needs of the buyer and seller. Forward Outrights are expressed as a price above (premium) or below (discount) the spot rate. The forward FX price is the sum of the spot price and the margin. This price is a reflection of the FX rate at the forward date where if the trade were executed at that rate there would be no profit or loss.

Defining Margin

Trading on margin means that an investor can buy and sell assets that represent more value than the capital in their account. Forex trading is typically executed on margin, and the industry practice is to

trade on relatively small margin amounts since currency exchange rate fluctuations tend to be less than one or two percent on any given day.

Margin, or leverage, implies that the investor is "gearing" his or her funds. Margin rates of 1% on the first \$10,000 in your account and 2% on assets greater than that, are common in online trading. What this means is that a margin of 1.0% enables one to trade up to \$1,000,000 even though there is \$10,000 in the account. In terms of leverage this corresponds to 100:1, because 100 times \$10,000 is \$1,000,000, or put another way, \$10,000 is 1.0% of \$1,000,000.

Margin is a Powerful Accelerator

Using leverage opens the possibility to generate profits quickly, but increases the risk of rapidly incurring large losses. It is important to review the margin thresholds and limitations in your trading agreement to determine the range of trading activities you can undertake.

Net Equity for Margin

This term is the absolute indicator of the extent of margin capability in your account. If your Margin Required exceeds your Net Equity for Margin you must close or reduce positions, or send additional funds to cover your positions.

Trading on Unrealized Profits

You can trade on unrealized profits in your account. Margin calculations are based on the Net Equity for Margin which includes such unrealized profits and losses as are current in your account.

Margin Call

Traders must maintain the margins listed in their account at all times. If funds in an account fall below the margin requirement, a margin call is issued. A margin call requires the trader to immediately deposit more funds to cover the position or to close the position.

Trade Size

The amount of the trade size is limited by the margin position. For example, a trader with \$10,000 in funds and 1% margin, can trade as much as \$1,000,000; however taking a single position in this amount would be extremely unwise and generate a margin call if the trade were to tilt slightly.

Majors, Minors and Exotics

Margin rates vary according to the liquidity (available inventory) of different currency crosses. Lower rates apply to Majors, higher rates to minors, and then highest margin terms for exotics.

FX ORDER TYPES

Margin Order Types

The basic landscape in FX trading involves a number of order types that facilitate efficient transactions. Below, we have defined several of the most common terms.

1. Limit

A limit order is commonly used to enter or exit markets at a specified price or better than the market price. In addition, a limit order allows the trader to manage the length of time that the order is current or outstanding before it is cancelled.

2. Stop if Bid

A Stop if Bid order is used to buy or sell a currency is the Bid price breaches the specific level in the price field. Typically, Stop if Bid orders are used to buy a FX position in order to make sure a certain level is broken.

3. Stop if Offer

A Stop if Offer order is used to buy or sell a currency is the Ask price breaches the specific level in the price field. Typically, Stop if Offer orders are used to sell a FX position in order to make sure a certain level is broken. Linking orders offers traders a logical aggregation of order types that outline contingencies in market participation, making it much easier to trade in moving markets.

4. One Cancels Other (OCO)

This most common linked order, OCO, stipulates that if one part of the order is executed, then the other part is automatically cancelled. In FX trading, OCO often refers to a buy order and sell order linked together so that when one of the orders is executed, the other is cancelled. Consider the OCO as follows:

the trader protects an existing position from loss (stop order) and ensures that profits are taken (limit order).

5. If Done (ID)

These contingent trade orders, also known as slave orders become active only if the primary order is executed first. An example would be a working order to buy EUR/USD at 1.2500 and a contingent order to sell at 1.2400 Stop if Bid -- if the first order is done.