

## **Tadawul FX Forex Trading Tutorial booklet**

**The purpose of this booklet is to give the novice foreign exchange investor an introduction into the fascinating world of foreign exchange. From understanding the basic principles of the FX market to guiding you on how to choose your investment strategies in practice, this publication serves as a useful reference tool.**

### **1. INTRODUCTION**

Foreign Exchange markets originated from the need of converting payments received in foreign currency into one's home currency. Today's natural foreign exchange participants include exporters, importers, investors in a foreign country as well as funds invested in securities abroad. All of these are labelled as 'real money', or money that is actually exchanged and delivered to make payments in the foreign currency. Exchange of real money creates a natural demand and offer, causing exchange rates to fluctuate by the law of supply and demand. A currency will lose value if there are more sellers while a currency will gain value if there is high demand in the form of many buyers.

With the large flows that real money create, for which we use the term 'liquidity', the foreign exchange market has become one of the biggest markets in the world. Thanks to its strong foundation, the foreign exchange market is an asset class of its own, suitable to be exploited by short-term speculation.

Speculation differs from 'real money' in that the exchange of one currency against another is not done in order to settle any obligation in the foreign currency, but with the sole purpose of cashing in on the relative value-change of one currency against another. With currency markets in constant oscillation and because any currency can be bought or sold against any other currency at any time, a currency speculator benefits from endless trading opportunities. Volumes traded by speculators far outgrow volumes of 'real money' exchange in modern markets, and daily turnover is reported by the BIS to be above USD 3Trln.

### **2. TRADING BASICS**

Currency Pairs:

This is the term used to express one currency against another. Currency pairs are named by combining the 3-letter ISO codes of two currencies. The price of a currency pair always expresses the amount of the 2nd named currency needed to exchange against one unit of the first named currency.

Example: USDSAR = 3.7500 means 3.75 SAR can be exchanged to 1 USD

ISO codes:

AED	U. Arab Emirates Dirham	SAR	Saudi Riyal
AUD	Australian Dollar	SEK	Swedish Krona
CAD	Canadian Dollar	SGD	Singapore Dollar
CHF	Swiss Franc	USD	US Dollar
DKK	Danish Krone	THB	Thai Baht
EUR	European Euro	TRY	Turkish Lira
GBP	British Pound	XAG	Silver
JPY	Japanese YEN	XAU	Gold
NOK	Norwegian Kroner	XPT	Platinum
NZD	New Zealand Dollar	ZAR	South African Rand

**Bid and Ask:**

A speculator may buy or sell any currency pair at any time; we say he is choosing 'direction'. A price quote of any currency pair always includes two prices; a bid as well as an offer. The bid price which is always lower is quoted first or on the left, it is the price at which an investor can sell the currency pair. The ask is generally of a slightly higher value, quoted second and displayed on the right; it is the price at which a currency pair can be bought.

Example: USDJPY price quote is 120.60 / 120.63, USDJPY can be sold at 120.60 (the bid) or bought at 120.63 (the ask).

**Long and Short:**

Are expressions used to describe the direction of a trade. After taking the offer, the speculator is buying a currency pair and will be considered to be long. By selling USDJPY on the bid, he is effectively short.

Going short on a currency pair expresses the view that the first named currency should lose value relative to the 2nd named currency. The seller is expecting a price drop, whereas the buyer or holder of a long position expects prices to rise.

**Pips and Spreads:**

The word 'pip' is used to describe a price difference. 1 pip is the smallest possible price change; it is an increase or decrease of 1 unit of the last decimal shown in a price.

Example: GBPUSD price change from 1.9225 to 1.9226 is 1 pip

CHFSAR price change from 3.0798 to 3.0785 is 13 pips

XAGUSD price change from 13.02 to 13.35 is 33 pips

The 'spread' is the price difference of the bid and the ask, in above example of the USDJPY price quotation of 120.60 / 120.63, the spread was 3 pips. The more liquid the currency pair, the smaller or 'tighter' the spread will be quoted.

A lot of investors ask us about the value of one pip. The answer is not a fixed amount in US Dollars or another specific currency. The value of one pip will depend on the currency pair and trade amount; we will be able to fully answer the question at the end of this chapter.

**Liquidity:**

Liquidity is the term used to describe what amount of a specific currency pair can be exchanged without significantly changing current offer and demand. High liquidity means that the potential trade amount has to be very large in order to cause a significant price movement. Liquidity of each currency pair may differ strongly. The largest liquidity can be found in currency pairs that include currencies of large industrialized nations, such as the USD, EUR, GBP, JPY, CHF and CAD.

The NOK, DKK, SEK, AUD, NZD, SGD form the 2nd tier, their liquidity is fairly good and they can be traded normally, as long as trade amounts do not exceed \$100mio equivalent.

'Smaller' currencies, such as the THB, TRY, ZAR, SAR, AED but also precious metals Gold (XAU) and Silver (XAU) are freely exchangeable, due to liquidity constraints they may be at risk of much faster and larger price movements. Some of the smaller currencies could be pegged to another currency, such as the SAR which is fixed against the USD but will float against any other currency that floats against the US Dollar.

The most actively traded currency pairs in the world today are: EURUSD, USDJPY, EURJPY, GBPUSD, USDCHF, USDCAD, EURGBP, together they account for more than 80% of the daily traded volume. Due to the large amounts that are traded in these currencies by real money, they enjoy wide-spread coverage by economists and analysts.

Trading smaller currency pairs, such as NZDJPY, ZARCHF, USDTRL or XAUGBP may be just as rewarding for a currency speculator. Given its potential for large movements, risks are higher but so are potential returns. TADAWUL FX allows its clients to pick from a list of more than 60 cross currency pairs, encouraging you to take a look at alternatives.

#### Trading:

Once an investor has selected a currency pair and the direction he wants to trade to enter an exposure, he needs to choose the trade amount. Speculation in the foreign exchange market is done using leverage, meaning that the amount of currency that can be purchased or sold will be greater than the amount the investor puts at risk. The cash that the investor keeps on deposit serves as 'margin', and covers potential losses of the trade in progress.

#### Amounts:

In the professional world, standard trade amounts of 5 to 20mio are in order. Large trades of 100mio and more can be executed with large investment banks, which in turn will break up the trade into smaller units.

The trade amount, also known as the 'face amount' describes the number of units of the first named currency that will be traded:

Example: Investor A sells 1mio EURUSD: he is selling 1mio Euros in exchange for US Dollars

Private speculators generally trade in smaller amounts. Depending on their investment size and risk appetite, trade sizes vary between 10'000 and 10mio. To facilitate trade amounts the expression 'lot' was created:

Definition:

- 1 lot = 100'000 for all currencies
- 1 lot = 100 Ounces of GOLD
- 1 lot = 1'000 Ounces of SILVER

Example: Investor A buys 4.5 lots USDJPY: he is buying 450'000 US Dollars in exchange for Japanese YEN

At TADAWUL FX all currency pairs can be traded in increments of 0.1 lots.

The counter currency:

Remember that any trade is in fact an exchange of one currency against another at a certain price. An investor buying a face amount of the first named currency is by definition selling the counter amount of the second named currency. The counter amount is calculated by multiplying the face amount with the price at which a trade was done.

Open exposure:

The moment a new trade is done, the investor is exposed to market movements. The buyer will benefit from rising prices, the seller gains if prices fall. Regardless of direction or face amount, the value of the counter currency will change as the price of the currency pair moves. The net difference of the counter currency amount at the present market price compared to the trade entry price is called the 'unrealized Profit or Loss'

Example: Investor A sold 1.2 lots USDCHF at 1.2180 (exchanging -120'000 USD against +146'160 CHF)

Market Offer 1.2155: +120'000 USD against -145'860 CHF: profit CHF 300

Market Offer 1.2195: +120'000 USD against -146'340 CHF: loss CHF 180

The profit or loss is called unrealized Profit/Loss

The value of one pip:

We are now returning to the question of the value of 1 pip. Using the last example we can express the unrealized profit or loss in pips. Between the selling price of 1.2180 and the potential profit price of 1.2155 lie 25 pips. Knowing the potential profit is CHF 300, 1 pip represents CHF 12. This calculation is also true for the difference between 1.2180 and 1.2195 which is 15 pips or 180 CHF:  $180/15=12$  CHF per pip.

1 pip can be expressed as 0.0001 in the case of currency pairs quoted to the 4<sup>th</sup> decimal or 0.01 if the price quotation ends at the 2<sup>nd</sup> decimal such as USDJPY or XAUUSD. Its value always occurs in the counter currency; in CHF for USDCHF or XAUCHF and in USD in the case of EURUSD or AUDUSD. The pips value for each particular case is now simply calculated using the face amount:

Example:           3 lots XAUUSD:  $300 * 0.01 = 3 \text{ USD}$   
                       4.5 lots EURGBP:  $450'000 * 0.0001 = 45$   
 GBP  
                       10.2 lots SARJPY:  $1'020'000 * 0.01 =$   
 10'200 JPY

#### Calculating Profit and Loss:

A successful speculator captures the price difference of a currency pair by buying when the price is low and selling the same currency pair when the price is high(er). A completed trade is made up of a trade pair; it needs a 'buy' and a 'sell' of the same currency pair and of the same face amount to complete a trade. The face amount and the price difference of the two trades will determine the net profit or loss of the completed or 'closed' trade.

Example:           trade 1: BOUGHT 4.2 lots USDCHF at 1.2465

                          trade 2: SOLD 4.2 lots USDCHF at 1.2508

                          price difference:  $1.2508 - 1.2465 = 0.0043$  (positive value = profit),

                          amount 4.2 lots = 420'000

                          PROFIT:  $420'000 * 0.0043 = 1'806 \text{ CHF}$

                          NOTE: Trade amount is USD 420'000 (first named currency)

                          NOTE 2: Profit or Loss is expressed in CHF (2nd named currency)

                          NOTE 3: The profit/loss is then converted into the speculators

                          accounting currency, in the case of USD:

$\text{CHF } 1806 / 1.2508 = \text{USD } 1'443.88$

### **3. LEVERAGE:**

As we have seen in the previous chapter, an investor in the foreign exchange market will deposit cash with his financial intermediary in order to hold currency positions. The face amount he can trade usually exceeds the amount of cash on deposit; we say that he trades on leverage. The face and counter amounts of a trade are not credited or debited to the investor's deposit once a trade is done; the exposure simply remains open until a closing trade is effectuated. While a trade is open, the cash deposit serves as a guarantee to cover potential losses. When the trade is closed, the profit or loss will be converted into the investors original deposit currency, the cash on deposit is therefore never changed into another currency.

Thanks to the high liquidity and due to the fact that under normal circumstances price movements in foreign exchange tend to oscillate in a fairly moderate range most of the time, important levels of leverage can be used. Face amounts of up to 200 times the cash on deposit can theoretically be traded. The degree of leverage one should use is determined by many factors. Generally we like to urge the investor to use extreme caution and progress in slow steps. The following paragraphs will show that very high annual returns can be achieved on any investment amount without undertaking high degrees of risk.

To properly understand the concept of trading, one must know that foreign exchange speculation does not consist of a single investment that is held in an investment portfolio for an extended time period as is done with certain stocks, real estate or bonds. Instead, successful currency speculation is done by accumulating profits through a rather large number of trades that are opened and closed in relatively short succession.

The leverage effect:

The effects of high leverage are illustrated in the following example. Let's first compare % and pips movements using EURUSD. This currency pair tends to move in a fairly stable way with an average trading bandwidth of about 0.5%; a very volatile day may see it move by up to 3%:

Example: EURUSD at 1.3000

percentage movement	0.1%	0.5%	1%	3%
pips movement	13	65	130	390
Rate down	1.2987	1.2935	1.2870	1.2610
Rate up	1.3013	1.3065	1.3130	1.3390

Cash deposit: USD 100'000

	pips movement	13	65	130	390
	face amount		POTENTIAL PROFIT OR LOSS		
leverage 1	1 lot	130	650	1,300	3,900
leverage 10	10 lots	1,300	6,500	13,000	39,000
leverage 100	100 lots	13,000	65,000	130,000	390,000

The example shows that the potential for profit or loss dramatically increases with higher leverage:

The investor using no leverage (leverage 1) is exposing himself to a maximum loss of USD 3'900 in the event of a 3% movement in the wrong direction. He can gain a maximum of USD 3'900 if the movement goes his way.

The investor choosing a leverage of 10 (nominal investment \* 10), is able to withstand a 3% market movement, but the price is high: The maximum loss of USD 39'000 represents 39% of his investment. Of course, if the movement goes his way, he will gain this amount.

The investor going for 100 times leverage is risking more than he can afford with only a 1% market movement. The moment that the unrealized losses equal the initial \$100'000 deposit, the positions will be liquidated. With the money gone, the investor will not be able to continue trading any further. Of course if he is lucky, he could double his investment with a single trade in a single day.

NOTE: We have chosen EURUSD in order to have the profit or loss occur in USD. However, since face amounts traded are in EUR while the account is denominated in USD, the actual leverage is 1.3000 times larger than the chosen 1/10/100 leverages cited in the above example.

Summing up:

The higher the leverage, the higher the potential risk or return. Choosing too high a leverage may put a very

substantial amount of your investment at risk. On the other hand choosing too small a leverage may prohibit you from taking full advantage of the possibilities of the foreign exchange market, in which case the investor's yearly performance may be too conservative.

How to choose the right leverage?

In order to answer this question correctly, one needs to look at the expected market movement of the currency pair to trade in and estimate the approximate time it may take for this movement to materialize. The investor must define risk parameters, by setting a limit to the amount of money that he can afford to lose in case of an adverse market movement. In short, the investor should carefully analyse each particular trade in advance in order to make a wise investment decision.

Example: XAUUSD trades at 640; a movement to 660 is expected over the next 5-10 days:

- movement from 640 to 660 is of \$20 or 3.13%
- time horizon: the movement could occur in as little as 1 day but should take no longer than 2 weeks
- RISK: XAUUSD may drop, according to sources the 628 level is considered a strong support

Trade can be analysed in the following way:

**Time horizon:** XAUUSD is likely to experience several \$20 movements in a single one month period, hence there is opportunity to make a similar trade 4 or 5 times per month!

**Risk versus Reward:** Target is a \$20 beneficial movement. With a strong support at 628, or \$12 underneath the current price, the investor will consider his trade to be wrong only if that point is breached. Adding a little bit of leeway he intends to close the trade with a \$14 loss at the 626 level: Potential gain of \$20 versus potential loss of \$14 is an acceptable risk/rewards ratio.

**Leverage:** One way of choosing leverage is to determine the total yearly return one may achieve using the assumption that 4 such trades can be done every month with a success ratio of 50%. Having 2 losing and 2 winning trades per month, one expects to net \$12 of potential gains each month (20+20-14-14), or \$144 in a full year for every single unit of XAU traded. 1 unit XAU is

worth \$640,  $144/640 = 22.5\%$  annual return with a leverage of 1, with a 10 times leverage a yearly return of 225% could be achieved.

**As you can see in this example, choosing leverage between 2 and 5 is highly sufficient to make a very good annual return.**

Key elements to retain from this example:

- At the time a new trade is opened, its closing strategy is known
- Potential Benefit must exceed potential loss for good risk/reward
- Timing Aspects must be respected
- Low leverage permits steady income generation over time

A different approach that may help an investor choose a suitable leverage consists of looking at how long of a losing streak one may need to support. In other words: what % of the investment one is willing to lose if there is a sequence of 10 or even more bad trades in a row:

Example: USDJPY trades a daily average of 40 points. An investor is looking to capture 35 pips movements in his favour, if his position is wrong, he is willing to risk a maximum of 28 pips.

Assuming 20 trades are done per month, the investor experiencing a bad streak of 20 losing trades in a row will be losing 560 pips in total.

The aggregate loss of these 560 pips measured in USDJPY trading at 117 represents a 4.8% movement. This means that a client trading with a 10 times leverage risks to lose 48% of his investment over the course of this 1 month period while an investor going with a 2 times leverage will risk less than 10%.

Diversification:

Similar to an investment in other assets, diversification is a good tool to reduce risks when trading in the foreign exchange market. The principle of diversification is to hold exposures in multiple currency pairs using different time horizons. This permits to split up potential profit and losses into smaller, more manageable units. Of course by increasing the number of open trades held simultaneously, exposure will increase and higher levels of leverage will be used. A careful investor holding 3 to 6

open positions at the same time will therefore choose to leverage each individual trade by no more than a factor of 3.

Example:

		Exposure in SAR	leverage
Cash Deposit SAR 5mio			
OPEN TRADES	Long 25 lots EURUSD at 1.3280	12.45mio	2.5
	Short 5 lots GBPCHF at 2.3700	3.65mio	0.7
	Short 20 lots XAGJPY at 1550	1.00mio	0.2
	Short 20 lots USDCHF at 1.2150	7.50mio	1.5
	Long 5 lots USDTRY at 1.3940	1.88mio	0.4
	TOTAL	26.48mio	
	leverage factor		5.3

Increase and decrease position sizes:

An investor actively following his open position may use leverage in a slightly more aggressive way by increasing and decreasing the face amount of his open positions as prices evolve. In order to help us understand this concept, we will take a look at the following price line, showing us price movements of GBPCHF between July '05 and March '06:

We can clearly see that this currency pair has oscillated in a range between 2.24 and 2.30 for 9 months, giving an active investor plenty of opportunities to sell when prices rise towards 2.30 and buy back as prices drop to 2.24. Assuming the expected price range has been set, the investor may trade the following way:

**Cash Deposit: CHF 250'000**

date	trade		total position	leverage	pips profit
12. Jul 05	BUY 5 lots at 2.2600;	open	LONG 5	4.5	
	trade 1				
19. Jul 05	BUY 5 lots at 2.2520;	open	LONG 10	9.0	
	trade 2				
19. Jul 05	BUY 5 lots at 2.2440;	open	LONG 15	13.5	
	trade 3				
28. Jul 05	SELL 5 lots at 2.2630;	close	LONG 10	9.0	30
	trade 1				
03. Aug 05	BUY 5 lots at 2.2450;	open	LONG 15	13.5	
	trade 4				
15. Aug 05	SELL 5 lots at 2.2700;	close	LONG 10	9.0	180
	trade 2				
19. Aug 05	SELL 5 lots at 2.2820;	close	LONG 5	4.5	380
	trade 3				
30. Aug 05	BUY 5 lots at 2.2640;	open	LONG 10	9.0	
	trade 5				
05. Sep 05	SELL 5 lots at 2.2720;	close	LONG 5	4.5	270
	trade 4				
08. Sep 05	SELL 5 lots at 2.2800;	close	no exposure	0.0	160
	trade 5				
12. Sep 05	SELL 5 lots at 2.2860;	open	SHORT 5	4.5	
	trade 6				
16. Sep 05	SELL 5 lots at 2.2920;	open	SHORT 10	9.0	
	trade 7				
20. Sep 05	SELL 5 lots at 2.3000;	open	SHORT 15	13.5	
	trade 8				
05. Okt 05	BUY 5 lots at 2.2680;	close	SHORT 10	9.0	180
	trade 6				
05. Okt 05	BUY 5 lots at 2.2620;	close	SHORT 5	4.5	300
	trade 7				
06. Okt 05	BUY 5 lots at 2.2580;	close	no exposure	0.0	420
	trade 8				<u>1920</u>
<b>Profit:</b>	<b>500'000 (GBP per trade) * 1920 (total pips gain) = CHF 96'000</b>				
	38% return in 3months				

Example:

Note: -Each time the net position is reduced, an existing trade is closed. This generates a string of profits, as the buy price is generally lower than the selling price.

Trading can be extremely profitable, the longer the range remains in place. If many trades can be done, a lot of profits will be accumulated. Breaking out of the expected range will however end the strategy and the investor will have to close his last trades at a loss. In the present example the investor should exit once 2.2250 is breached to the downside or 2.3150 on top, allowing for some leeway around the chosen range boundaries of 2.24 and 2.30 respectively. In the above example closing a maximum of 3 open positions would come at a total cost of 750 – 900 pips.

#### Short-term versus Long-term

The previous example of GBPCHF was clearly a long-term trade, spanning over several months, during which a total of only 8 trade pairs were executed. This requires a lot of patience on the side of the investor and certain skills to detect an extended period of range trading early enough.

Currencies however tend to oscillate all the time, in tight ranges if you look at a short time period and in wider ranges if the time period is longer. Compare the following chart with the example of GBPCHF above:

Example: EURUSD oscillating in a 30 pip range over a 24h period

A very active trader may choose to go short EURUSD above 1.3305 and go long underneath of the 1.3285 level. A large number of trades will be traded in a very short time-span.

An investor is free to choose the time horizon he wants to expose himself to. A key element in successful foreign exchange trading is to 'stick to the plan' and exercise a certain trading discipline. This means that if a trade was entered with a short-term view, it must be closed before a large movement occurs even if it comes at a loss. Of course short-term and long-term strategies may be mixed or dealt in parallel, once again with the idea of achieving better risk diversification.

Summing up leverage:

- Trading in face amounts of between 0.5 to 3 times your initial cash deposits is reasonable
- Before adding new trades, know your exit strategy in order to estimate potential profits and losses before they occur
- Hold multiple currency pairs exposure to diversify risks while keeping an eye on overall leverage
- Trading a short time horizon forces you to be more active
- Trading long-term requires patience
- Total leverage of 5 to 20 times allows for very good annual return while keeping risks in check

#### **4: DETECTING TRADE OPPORTUNITIES**

So far we have covered the basics of foreign exchange in order to get an understanding of what it is all about. The chapter on leverage has shown that in order to successfully trade in the foreign exchange market, one needs an opinion or a view as to what kind of price movement a specific currency pair will experience over a coming time period. Only then can an investor decide on a trade strategy that will allow him to capture a benefit if this view was correct.

So how does one analyze currency markets? How do you choose sensible entry and exit levels, how can someone forecast future price movements?

Coupling good risk management with good forecasting must be the aim of any speculator. This chapter shall help you to understand how a view or opinion can be formed.

Most of the traders having a long term view prefer to trade using the economic approach as described below.

### **The Economic Approach:**

Returning back to basics, we outlined that the foreign exchange markets exist because of a natural need to exchange one currency for another. From a macro-economic viewpoint, we can say that one currency will rise against another if there are more buyers than sellers. This is simple enough; it follows any open market's rule where prices are decided by the current offer and demand and generally fully applies to foreign exchange markets.

With an economic approach, one is comparing economies of two countries or economic areas in order to judge how real money flows will evolve over time. A country's economy that runs at a faster pace than another country will attract more investments, which in turn will increase production and exports, generating demand for that country's currency and drive its price up, relative to the weaker economy.

An economist will rightfully measure each country's economic activity, by looking at a big range of data such as GDP, employment levels, debt, growth and inflation ratios, interest rate levels, international trade balance and more.

Thank to all this input, the economist will be able to try and forecast developments of real money flows. Comparing past market reaction to economic changes will allow him to estimate roughly what price shifts a future change in economic activity may cause.

The art of economic forecasting is something the average investor will have a very hard time doing by himself. Instead, most investors will rely on economic reports done by an expert. Many of the large banks that actively

participate in the foreign exchange market will have a team of economists, that publishes economic reviews and forecasts on a regular basis. Such reviews can be found in daily, weekly or monthly formats as well as special issues highlighting events that are believed to have large potential to cause currency markets to move. A few subjects that constantly draw the attention of economists are:

#### Interest rate shifts

Changes in interest rates levels will almost always cause a shift in currency exposures of real money. A country raising its interest rate level will become more attractive for outside investments and generate demand, while a country lowering its interest rate level will become less attractive and money will flow out.

#### GDP Growth

The GDP growth rate is used to compare economies of different countries. An above average growth indicates that more jobs are created, salaries increase faster and that the purchasing power of the country will increase relative to another country with lower GDP growth. The higher economic activity in this country will at least in part be financed by foreign investments, creating demand for its currency, driving up its exchange rate relative to other currencies.

#### Trade Deficit or Trade Surplus

An economy running a trade deficit is importing more goods than it is exporting. When importing goods from a foreign country, one needs to exchange or sell his home currency against the foreign currency in order to pay for those goods. The reverse is the case for an exporter, who will need to exchange the foreign currency received against his home currency in order to pay the costs to produce the exported goods at home. We can therefore say that if a country is running a net trade deficit, its currency is sold and should decrease in value in the long-term. In contrast a country with a trade surplus is net exporter of goods; its currency will have to be purchased.

While the macroeconomic theory can help to explain generalities and how the market is supposed to perform when changes occur, the reality is a lot more complex. Changes in economic activity develop slowly over time and in small steps, giving financial markets plenty of time to adjust. Take the example of the release of a yearly GDP growth rate; by the time it is officially announced, the market has had to absorb a whole string of news and reports that indicated weeks in advance that the GDP growth rate is expected to perform better or worse than the previous year.

Market psychology:

Another very important aspect not to be forgotten is what we commonly call 'market psychology'. As we have seen earlier, financial markets such as foreign exchange move by changes in supply and demand. Economic changes will influence supply and demand which can be witnessed by price changes. Market participants spend a lot of time trying to forecast economic developments, we can say that they try to estimate future changes in real money flows, allowing them to forecast as early as possible whether a currency should rise or fall.

The market discounts all news events:

The moment a forecast for an economic event is changed; market participants will try to take advantage by adapting their market exposures to new expectations. The act of shifting one's market exposures will drive prices; this may happen well in advance of the actual official data release since individual investors will discount their expectations by taking advantage of them as quickly as possible. In other words by the time that an economic indicator is being released, large parts of its impact have already been absorbed by the markets. Once the date is actually released, the risk of a counter-movement is fairly large:

Example: Monthly US Industrial Productivity is believed to rise by 0.8%.

After falling 0.1% in the previous month, the data is due in a few hours.

In expectation of this good result, the Dollar has traded higher all morning.

Actual data release shows an increase by 0.5%.

Market reaction: The Dollar is immediately falling.

Market psychology: While 0.5% is a healthy rise, it is a lot less than market expectations of 0.8%

based on which the Dollar had gained value earlier in the day.

We can see that economic forecasting is far from being an exact science. In addition we must note that not all economic improvement will be beneficial to a country. Take interest rates as an example: An increase in interest rate levels from 1% to 4% will have a completely different impact from that of a change from 5% to 8% or from 10% to 13%. A certain increase is good for a country, it will help to steer economic expansion and it will attract fresh investments from abroad. This will drive future expansion, the currency will benefit. Hiking rates too far or too quickly may however drive inflation, choke economic expansion and send a country into recession, causing a currency to fall.