Real Cost of Non-Institutional Forex Trading - FX Discussion Paper

by Forex Facts

* Disclaimer

Some of the content herein may be inaccurate or unintentionally wrong. The Foreign Exchange (FX) market operates behind a multi-layered veil as you are probably aware and as such only an empirical, rather than detailed quantitative, study is possible. In general I believe most experienced FX traders will agree with the main content of this paper, and can participate in improving this reference by writing to me, at the address given in the menu, to offer the benefit of their own knowledge and experience.

Please consider this treatise more as a discussion paper rather than an authoritive or academic reference. After 18 months of trading I still consider myself a novice trader, but decided there was a need to discuss the many issues affecting new and amateur traders that do not appear to be addressed openly anywhere at this time. I provide this with good intention, without intended malice, and suggest all content be accepted beneficially. Abbreviations

MM and MM's – refers to Foreign Exchange Market Makers, or FX trading houses.

FX and Forex – refers to the Foreign Exchange market.

CoC – stands for Cost of Carry or Rollover. FX pair interest rate differential credit/charge.

P/l p/d – represents per lot, per day.

Introduction

Most individuals entering the Foreign Exchange (FX) market anticipate a free floating, equitable investment market where a trader has approximately 50:50 chance of trading successfully with completely random trade selection, as I did initially 18 months ago. However the reality is that 80 to 85% of private FX accounts opened lose money overall. The purpose of this paper is to inform the individual trader of the many mechanisms in place that significantly reduce their chances of profitable trading, using a typical novice's skill, to an estimated average 17.5% success rate overall. I will also suggest methods to increase the probability of success using well established methods of trading including arbitrage and other non-standard methods that I have studied extensively and implemented with varying success. My opinion is that anyone who wishes to profit through trading the Foreign Exchange market should avoid trading in the normal manner through a Market Maker. I no longer do this except in very exceptional circumstances with very strong, long-term trends.

Of the reader I ask only that you consider what I have written, research further the reality of trading for the individual, share your knowledge and experience with others, and participate in the FX market in a realistic and informed manner so that you may fulfil your hopes and dreams.

Table of Contents

-	•	- 1			
1)	180	٦I	21	ım	er

Abbreviations

Introduction

Table of Contents

- 1. Understanding Forex price changes
- 2. Losing Your Shirt A List of Unseen Trading Costs
- 3. Trading thoughts
- 4. Alternative Trading Methods
- 5. The Best and Worst MM's
- 6. The Fallacy of Market Size
- 7. The Fallacy of Low Cost Trading
- 8. Can you win?

Conclusion

1 Understanding Forex price changes

When you Buy or Sell a currency pair, your trade influences the market. Which way and by how much are natural questions. The precise answer to this eludes me still after 18 months of trading, however I include this section to tell you what I have learnt which will affect your trading.

- Market Maker Price comparison

Although some Market Maker's (MM's) prices are consistently lower or higher than others, this is only by a few pips overall. Through a computerised comparison study over many weeks I have observed the price of a given FX pair at different MM's rarely exceeds the spread at any time. This does happen however, particularly during volatile trading periods and around weekend close/open trading more frequently than any other time. This would appear an opportune time to Buy and Sell a pair simultaneously at two different MM's, however in placing your order, the price is either corrected or price slippage absorbs any possible small arbitrage profit. I have never profited by this method, though visually the opportunity often presents itself.

- What drives the price to change?

This is in fact a complex question. Most traders assume that each time the price of an FX pair shifts, this change results from an actual trade in the pair. Not so.

To prove this point watch the price change of either Usd/Chf and Chf/Hkd (Tricom demo account) –or-Usd/Dkk and Eur/Usd (Oanda or Tricom demo account). These and all similar linked pairs almost always shift simultaneously. Why? Because the third related pair of each of these linked pairs is pegged or fixed. That is, as example, the Hong Kong Dollar has been pegged at 7.8000 to 1 Usd for over 20 years (Since Oct 1983). So when Usd/Chf price changes, Chf/Hkd must be immediately adjusted or arbitrage opportunities will immediately occur. This pegging is changing shortly to a 7.75/7.85 trading band.

If you compare 10 or 25 year FX price charts of Nzd/Usd, Nzd/Jpy, Aud/Usd and Aud/Jpy you will see they all follow a very close pattern of this period (Online charts of all currencies pairs can be viewed at http://quote.fxtrek.com/misc/fxcm.asp). Variation in these and dozens of other currency pairs are not independent as the trader might expect, they all react to Usd price variations more than any other influence. Again watching the prices live, a major fundamental change to Usd, Eur or Jpy can cause a price shift in both related pairs and seemingly unrelated FX pairs. The point here is that when you observe hundreds of price variations in a Minor pair like Aud/Usd over an hour or so, there may be literally no trading on this pair over this period, even though the countries foreign exchange value has perhaps dropped a percent (i.e. billions of Aussie dollars lost in international buying power). The fact that an FX pair may trade very little but is represented as trading constantly by MM's, and the value of daily trading being grossly misrepresented (by all MM's) are important factors in understanding this markets deception and will be explained in detail below.

When you read that the FX market is the largest in the world, and trades an average of \$1.3 trillion per day, much of this is in game/demo accounts (or so I've read), and on its own, if we remove leverage (counting only real trader funds) we are left with a much smaller market that Futures or Equities. How then does the market stay liquid? That would take a while to explain, but suffice it to say the Market Makers simply hedge against your trades and never lose regardless of your position. Relying on the spread, slippage, price manipulation and many other methods to make their profit from your trade.

2 Losing Your Shirt – List of Unseen Trading Costs

Assuming you do not want to lose your investment you should be aware of all the costs which you may incur in an individual trade so that you may better assess the risks you face. All Market Makers advertise that the Spread cost is the only cost you will pay to trade through them. This is never the case, and in practice (except in a demo account) is much less than you will actually pay trading FX at any Market Maker.

The following is a comprehensive but incomplete list, with brief explanations, of real-time costs which are common to individual trading at all Market Makers. The last item in this list (Price Manipulation) is in my experience the most costly to the trader, outweighing all other costs collectively.

- Currency Pair Spread

This is the advertised trading cost, typically 3 to 5 pips for majors. The spread is generally a fixed cost and is greatly increased by the many well established, and successful, MM, Bank and institutional trading bodies methods below)

- Slippage / Requoting

There are several methods MM's use to obtain one or more extra pips during trade execution. Almost all MMs do this, and at least 99% of the time that slippage occurs it will cost you 1 to 5 pips, while slippage in your favour very rarely happens. Even ACMarkets who advertise WYCIWYG (What You Click Is What You Get) give you the live price up to a minute after you have clicked the order button, you can verify this best on an older (slow) pentium using their Flash demo account. This technique, referred to as Order Price Lag, is also implemented effectively at IGMarkets and costs the trader 1-4 pips about every third trade. I am a professional programmer and I know this lag does not have to occur in Java, Flash or Scripting, so conclude it is quite intentional.

Many other MM's simply change the price after you make your trade to suit their needs. Eg. you buy x at 0.7500 then find in your statement that you bought x at 0.7007. Oanda do this, and Dukascopy do this wildly and

consistently. I had Requoting of an extra 2 pips of buying then 75 pips more on selling the same pair (I have a saved image of their tick chart where the price was steadily rising for hours, and dropped 75 pips a few seconds after my order was placed and then immediately returned to the former price. I was charged at the (less than 1 second) price fluctuation, 75 pips below the real/global FX price.). This happens on most trades at Dukascopy, at least in 2004. Contacting them was pointless they would not admit to or address this, so I closed my account later that week. This method is called Requoting, some say this is sort of like a bookie changing the order of placings in a horse race after the fact to increase their profit.

Slippage simply undermines any small-profit trading and collects a considerable bonus profit for MM's on top of the pair Spread.

- Stop Hunting

There is one golden rule in trading the Forex market, 'DO NOT SET STOP-LOSSES' on your trades unless unavoidable. Setting stops is very unwise practice for traders particularly if stop-losses are placed < 30-50 pips from the opening price. Your stop-loss becomes a known target for FX Operators and will be triggered if possible to take your money, however small your trade. This practice definitely occurs and is also applied to Take-Profit/Limit orders. See the section "Price Manipulation" below for more detail on this.

Again, in my view SL should not be used at all unless unavoidable.

- Price Shading and Suppression

At many MM's price shading is particularly noticeable when the current price approaches a new (short-term) level where the price is consistently held back, and is clearly a disadvantage/cost to the trader trying to open or close a trade. At IG Markets, who have a minimum 5 pip spreads, they frequently shift prices (or make them unresponsive in one direction) using this method. For example, up to 8 pips on Nzd/Jpy in one direction (having an 11 pip spread) for long periods. Having a wide spread gives them an advantage over more competitive MM's. Most MM's perform this for various reasons. The first reason will be to protect them from rapid price shifts in their anticipated direction. The second may be simply to discourage ordering which disadvantages their trading goals.

Oanda shading is similar to IG Markets though with tighter spreads the shifting is less. Tricom on the other hand did not shade prices (at the times I was comparing MM's for this) whilst both IGM and Oanda were manipulating the current price of many pairs in the same direction as each other.

I have compared price differences over many weeks between up to 4 MM's at a time by writing programs which concurrently capture pixels on their price screens, analyze current prices, compare and output these to text file for direct input to MS Access graph. Thereby discovering that prices are shifted purposefully and individually between MM's but rarely exceed the total spread cost of the instrument. As I've mentioned elsewhere inthis article, the main variations from this theme were found very near weekends, and during rapid price shifts often resulting from scheduled fundamental FX announcements which were outside expectations (commonly USD or EUR announcements).

Like shading Price suppression occurs most of the time at MM's. You can see this very clearly by viewing the chart of Eur/Dkk for example, or Eur/Chf at http://quote.fxtrek.com/misc/fxcm.asp and then simultaneously at Oanda, FXCM, IGMarkets or probably any other MM. The fxtrek chart shows a lot of price change which is never available at MM's. Yet will shift in perfect sync when consistent rise or fall of price occurs. Comparing many MM's historical tick charts (which get their data from the same interbank sources) the prices are clearly

suppressed. Since Market Makers are allowed to set any price they wish they are simply limiting your opportunity by suppressing price action, for their own purposes. They must however stay within the spread difference at all times or an arbitrage (no-risk) opportunity is created for the aware trader.

- Post-Order price shift

Price commonly shifts (2-5 pips) against the trader and for the underlying bank or MM, within seconds of trade execution. This is most noticable in slow markets.

When an individual trader goes long (buys), the price will drop against him representing a positive shift for the Banks who effectively sell the corresponding currency to this trader. Once the trade is processed, the price will continue to shift against trader (due to shift in average investment in this FX pair perhaps) until an equal or larger transaction is placed by another trader on this currency pair. This acts in favour of the underlying Banks not the trader.

May account for 10 to 30 pip loss in non majors, and est. 5 pips in Majors (Dependant on Market, and +/-balance of open orders).

- Funding Your Account (Transferring money overseas)

The cost to fund your account can add heavily to your starting losses.

Transfer cost to fund, and withdraw funds, for an overseas trading account will commonly be \$100 to \$500 (for up to \$10000 deposit). Unless you can trade at a MM within your own country, you will have to transfer funds by Credit Card (full cost 5 - 8% once returned). Bank Cheque-\$10-25 or

Wire-\$35-50 each way, with an additional currency exchange cost of 2.5% each way.

ThomasCook/Travellex/Banks quote 0.75 to 1.5% but apparently wait up to a week in-house to select the most favourable FX rate (for them) thus add additional 0.75 to 1.5%. This is standard practice with TC and some banks, so I have heard, and is representative of the amount I was overcharged with every transfer I made with them. So you may find funding your account higher than quoted, and low cost options usually don't exist. Further Bank cheques may be intentionally delayed, in my experience, by the parties concerned presumably to collect your monies interest. Returning of my account funds cheque by Oanda in 2004 (by mail) took over three weeks to my home mailbox. Cashing it took another 9 weeks. Which I had to assume was held up by Oanda intentionally. Average bank interest for 13.5 weeks on this sum was approx \$50 AUD. I complained to my local (receiving) bank about this with full explanation, and was surprised that they paid me \$46 to cover the interest, even though they were not responsible.

The cost of transferring money internationally has been higher than quoted every time I have done this. So be aware this may happen with some or all of your overseas account fund transfers.

- Difference between Cost of Carry charges/credit

Interest spread credit/cost varies from firm to firm. A company which gives you a very wide spread between Long and Short position interest simply keeps some of this for themselves (egs. fxsol.com and ApexForex.com) amounting to an additional charge. FXCM is an example of very close L/S interest payments/charges which is fairer to the client. However this exists only for Standard accounts. Mini FXCM accounts have clearly the worst CoC charges of any MM I've yet seen. They simply charge the negative rate whether you hold a Long or Short position. Further I had to write approx. 25 letters over two weeks in early 2004 and April 2005 to ask them their Mini CoC charges. They would simply not tell me until I applied considerable pressure and a lot of time and

effort to find this information out. Quite clearly they want to hide their Mini-account CoC charges from public view.

Oanda and IGMarkets have reasonable CoC charge/credit and pay the CoC that is expected (which some others don't). Avoid the many MM companies who simply charge \$USD1 per lot per day for both Long and Short positions. This is a rip-off, but could possibly be used to your advantage (with limited success) using the following quasi-abitrague technique:

Eg.1 If a company charges \$1USD p/l p/d (where a lot is 10k units of base currency) you might buy Gbp/Jpy at eg. FXCM paying current Buy differential interest of \$2.24USD p/l p/d, and Sell the equivalent size Gbp/Jpy at the \$1USD p/l p/d Market Maker, to obtain completely risk free \$1.24USD per day interest into your FXCM account. This technique has its management problems and costs (mainly transferring margin between accounts) but risk should remain zero with proper margin maintenance in both accounts.

Therefore holding two standard G/J lots which produce \$452.60 interest without risk, is theoretically possible. Not this easy in practice though.

FX Market Maker Rollover comparison table is set out below. The rollover values shown are mostly from the first half of 2004 so will not be accurate. Use as a guide only.

Rollover (CoC) Comparison Table - 24hours – 10000 Lot - in USD or %

- Liquidation and other Contractual Risks

In the event of the Market Marker going into receivership, most contractual agreements specify you may get only part or none of your account funds back. Additionally, one Market Maker specifies in the agreement you must sign to open an account that your money may be used at any time to cover other trader's loses where they use a third party company to execute both client's trades.

FX CFD's would seem a greater risk in such cases, where no actual underlying trade is placed on your behalf such as Tricom, IGMarkets and many others. However I assume even when you are trading FX directly on the market, I have never read an open trade is protected such that you actually own the non0-margined currency you are trading. If your MM goes down, I believe they will close simply your trades, and control your capital until assets are settled following liquidation. Whatever is the case, this seems an important risk which should be understood, and which does not exist on the (non-CFD) Equities market, where the trader actually owns the shares they have traded and can obtain a certificate at any time, allowing them to trade their shares privately or through any other Equities dealer.

- Price Manipulation

As I mentioned above, in my understanding, this item is the most costly to the trader, outweighing all other costs collectively. Price Manipulation occurs to trigger your Stop-Loss, to avoid your TakeProfit/Limit, and to move the current Pair price against you.

In Practice, immediately after you buy or sell a pair you will see the price move against you a few pips. This may not occur if trades occur with yours in the opposite direction. Moreover, once your trade is placed 'Operators' will move the current price quickly against you, and avoid letting it rise in your favour. The price may move against you commonly 30 to 100 pips in the hour or so after your trade is placed. You may see over a week or so that the pair price will reach very close to your starting price and fall again several times. With Nzd/Jpy this is very noticeable. I've found after a week the price will finally move a little over your starting

price but never much. There have been exceptions, but 80% of my Nzd/Jpy trades followed this pattern over the last year. I didn't believe it for a long time even though it seemed obvious from my first week of trading. If you set a Take-Profit/Limit you will commonly see for a week or so the same purposeful activity. For example the price in week two of my last N/J trade exactly reached my Limit five times but didn't exceed it once by even one pip or my Limit would have been triggered and I would have profited. I expected this and hung on for three more days until I made 25pip (having been down 130 pips). As it happened there was a bad Jpy announcement and the price shifted in my favour 40 or so pips so I sold the pair at a meager +25 pips. I compromised again, mainly because the psychological pressure applied by the Operator's methodology worked on me one final time.

This pattern of background manipulation seemed unlikely at first, perhaps imaginary, but after hundreds of trades turning immediately against me (as well as the best fundamental expectations), I finally accepted it wasn't my bad judgement. Then I found reasonable proof of this intentional manipulation as follows:

Dr.S.Sivaraman who writes a daily article on www.Fxstreet.com advises readers about 'Operator' price manipulation in his articles as follows:

Don't take positions more than 25% of your equity. The operator will trigger the margin call.

Follow our forecast and if the stop is triggered re-enter after 2 hrs, as the operators will always dip the market to rise and vice versa.

Avoid becoming emotional; the operators try to trigger it by cutting psychological support or resistant levels.

Understand the intention of the operator to do right directional trades.

and Igor Belitsky, analyst of FX-Dealer.com, in a Live FX Q&A session discussed the following:

- Stop-loss hunting and chart patterns
- Stop-loss hunting psychological damage
- How to benefit on stop-loss hunting

There are many other references and proofs I could provide on intentional background price manipulation, including that most Market Makers accuse their competitors of Stop Hunting while denying that they do it themselves. However if the above doesn't convince you, or at least make you curious, then more on this subject will probably make no difference.

Be warned, price manipulation stacks the odds against you considerably. This is more relevant in non-Majors but occurs across the board. Understanding this was vital for my survival and modest profit. However, I have learnt after a lot of time, that the odds are so poor for the private trader that as I have said earlier, I no longer do single pair trading except with very strong long-term trends. And probably wont bother at all with FX in time.

3 Trading Thoughts -

Is it any wonder that an estimated 80 to 85% of opened FX trader accounts lose money. (I have read two articles from different professional sources over the past year stating that (1) over 80% of FX trader accounts and (2) approx. 85% of opened FX accounts lose money overall).

Every conceivable method imagined over the past 150 years of currency trading, that is either legal or at least can not easily be proven to be illegal and/or prosecuted successfully, is used by all or most of the trading providers of the FX market. You should become aware of these methods and realise the true cost of trading FX if you are to trade into profit for yourself or decide whether FX is for you.

There is so much deception used in this market, that it can make your head spin trying to work out what is going on behind the screen and what risk you are taking.

The safest way I have yet found to trade for profit is to trade only with strong trends, using cost of carry in my favor, for long time periods and for large profits. Never setting stops or profit limits and riding it out until I've reached my goal such as 300 to 1000 pips. Of course never wagering more than I can happily lose.

Alternatives exist to the above, such as arbitrage or other more complex or intelligent methods of trading. All contain risks but finding a low risk, profitable method of trading will never rely solely on the very popular historical technical chart analysis, which I think is popular mainly because it is so much easier than researching and understand the market, which takes real effort. The trader must understand the market he trades on and that takes detailed fundamentals research and understand all aspects of the 'game'. You want to profit, so do I, so we must understand the fundamentals of the market we are investing in. Including what the other players are doing to profit from our inexperience or ignorance. Or we will lose in the end.

4 Alternative Trading Methods

Trading by the standard 'single FX pair' method provides very high odds of losing your margin as I have said earlier. In the following section I will list a few methods of trading which may increase your odds. Most of these are practiced widely, by private and institutional traders.

- Interest Charge difference between MM's

*Also See 'Difference between Cost of Carry charges/credit' sub-heading above.

Buy a currency pair with higher interest credit at one Market Maker and simultaneously Sell the same pair at another MM with lower interest payout.

Example 1:

Buy 100k lot of Gbp/Jpy at Tricom, IGM, Oanda etc... for current rollover of approx. US\$22.50 p/d, and simultaneously Sell 100k at Ac-markets where rollover cost is –USD\$1 p/d

* Note this has been available for over 15 months, and as ACMarkets changed their rollover policy in 4/2005 to similar credit/charge as Oanda, Tricom, this is no longer useful at these particular MM's

Example 2:

Similar to above Buy any high interest paying pair at Tricom, IGM, Oanda etc... and sell the same lot value pair at GCI who have –US\$1 p/l on Mini lots. Thus making a profit without risk.

- Pegged-Currency-Pair Method

If you go long 100k Usd/Hkd you will receive (currently) approx. US\$1.10 per day using say US\$3000 margin, without significant risk, which could pay you around 12% over 12 months. Hkd has been pegged to the Usd at 7.80 for over twenty years, and will soon be widened to allow trading band of 7.75 to 7.85

Alternatively you could trade Usd/Jpy against Hkd/Jpy (avail. at Tricom), where the pegged side of the triangle Usd/Hkd is fixed to 7.80 range. Buying Usd/Jpy and Selling Hkd/Jpy will provide less interest than Usd/Hkd with again little or no risk, with the added bonus that there are significant price variations in the pair where closing both simultaneously will give profit over the daily interest you will earn (currently approx. 6.1% p/a).

There are several pegged pairs including Eur/Dkk, which may provide relatively risk-free daily interest when the differential is great enough. Again you could alternatively trade Eur/Usd against Usd/Dkk when the differential allows, for interest plus gain from periodic variations in price.

- Price difference between different markets.

A quite standard Abitrague methodology is to 'Buy Spot and sell Forward'. Where the trader gains interest from Spot, reinvests this for the (Forward) period for interest, closes both at end of forward period without risk.

As Forward Outrights vary daily, fluctuations against Spot price can lead to modest gains on top of the above interest accumulation. Gains here are small but relatively risk-free. NB: nothing is completely risk-free in the Forex market.

Institutional traders use such arbitrague methods to trade a large variety of markets. Examples are Equity indexes against individual or groups of Blue chip stocks, Futures against commodities, even one bookie against another bookie's odds provide an abitrague opportunity for these traders. Complexity and risks vary with this type of investment and private traders are said to rarely trade this way. I have read that sophisticated computerisation and a thorough understanding of the markets being traded are essential to success.

- Price Variation between MM method

Creating a live data stream from several Market Makers through capturing pixel colors from their data screens and using character recognition analysis to produce the live data which I then compared generally every 5 seconds over long periods, I was able to log and graph variations in prices from these Market Makers with an aim to trade one against the other. One warning, they know about this and they don't like it – it costs them!

The following is a small sample of data I recorded which indicates this method is feasible but I have to say honestly – is it worth the time and effort? I decided it was not for my interests.

Analysing Tricom against Ac-Markets and Oanda, In the first hour recorded 1 below and 4 and 5 above cost on E/U, (NB: ACM being Demo may not be valid data(?)). Very similar result testing Usd/Jpy and Gbp/Usd (the only ones I tested)

Also during earlier manual analysis I noticed near weekend prices varied more than at any other time with some MM's. So check both ends of weekend for variations.

Example from 2004 test data—Result is probably can make 3 or 4 pips occasionally.

Result – from Access charting period:	Result – from Access charting period:	Oanda	*IGM
22/3/04 to 13/4/04 (3 WEEKS)	5/4/04 to 13/4/04 (1 WEEK)	pip cost	pip cost
Oan<->CMC in pips	Oan<->CMC in pips		
EURUSD - 6.3 or 5(at least twice during period)	EURUSD – 5 or 3(at least twice during period)	1.5	3/5
	GBPUSD – 6 or 2.4		
GBPUSD - 6.3 or 3.3	EURGBP - 5.5 or 3	4	3/5
*EURGBP - 7.5 or 5.5	EURGBP - 5.5 0F3	4	3/5
	EURCHF - 4.3 or 3.3	1.8	3/5
EURCHF – 11.5 or 5			
USDCHF - 7.3 or 6	USDCHF = 6 or 3	2	3/5
0000111 -7.5 010	AUSUSD - 6.3 or 3	3	3/5
AUSUSD - 7.5 or 5			
AUSJPY – 9.7 or 8.5	AUSJPY – 9 or 6	2	3/5
A030F1 = 5.7 01 0.5	USDJPY - 6 or 2.4	4	3/5
USDJPY – 7 or 5			
EURJPY – 14 or 5.7	EURJPY – 4.5 or 3	2.7	3/5
LORSF 1 = 14 01 3.7	CHFJPY = 8.5 or 5.5	2.7	3/5
CHFJPY - 8.5 or 7.2			
GBPJPY – 9.4 or 7	GBPJPY = 9 or 6	3	3/5
GBPJP1 - 9.4 017	GBPCHF – 10.3 or 4	7	8/12
GBPCHF - 10.3 or 7.9			
NZDUSD – 4.3 or 3.5	NZDUSD – 4.3 or 2.5	7	8/12
NZDOSD = 4.5 0f 3.5	USDCAD - 4 or 3.5	4	4/5
USDCAD - 6.5 or 5			
HSDDIAL 26.5 at 22	USDDKK - 26.5 or 20	4	4/ 6or7
USDDKK – 26.5 or 23	USDNOK - 200 or 100	25	40/60
*USDNOK – 200 or 100	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
		30	/60

^{*} No account with CMC currently so using IGM spread which is similar to CMC.

Examples:

 $Aud\text{-Jpy*}0.95(Buy) - Aud\text{-Usd(Sell)} - Usd\text{-Jpy*}0.5(Sell) \ , \ variation \ around \ cost \ for \ 2 \ days \ , \ say \ 9 \ to \ 15 \ pips \ (currently \ total \ interest \ is \ -\$0.42 \ p/d)$

or

 $Nzd\text{-}Jpy*0.95(Buy) - Nzd\text{-}Usd(Sell) - Usd\text{-}Jpy*0.5(Sell) \ , \ same \ parity \ around \ cost \ as \ above.$

⁻ Three or four Pair variation with minimal interest method

^{*}Looking for profit from total price variations while paying little or no interest.

- * By replacing Usd/Jpy with Hkd/Jpy (as Usd/Hkd is pegged) in both examples above, interest paid is significantly less while variation is slightly increased.
- Opportunities in other markets

Examples:

Variations of ASX200 index v's the top 5 aust.

Companies from different sectors whose historical price varies little

One stock against another with near identical price history.

This exists in many markets including the US stock market.

- Interest on holding shorted Equities

Example:

Margined Interest (such as 10% CFDs) on Shorted stocks can provide significant annual interest. Example shorting margined New Zealand shares could provide 26% p/a interest in 2004.

- Use Bank interest for unused money

Currently in Australia receiving 5.5% interest in Citybank CMAccount, 6% in CBA or Bankwest Account (on 130k = \$8000p/a) is preferable to leaving unused funds in 0% interest trading account.

- Interest Payout time price fluctuations

At the time interest is paid eg. 4AM for IGMarkets, look for temporary changes up to 10 or so pips which will reverse shortly after 4AM (often within 1 hour or so). This happens infrequently but is obvious an presents a favourable opportunity when it does occur

There are so many variations on Aritrague methods that can by applied to financial markets that I can only suggest searching the internet to research these, and apply them cautiously. In my experience whenever a profitable opportunity presents itself in the FX market, through variation in interest rates, price variation or whatever, it is quickly corrected.

5 The Best and Worst Market Makers (from personal experience)

The Best of what's available: (in my opinion)

- Oanda

Lots of useful features such as calculators, news and live charts, stable but slow to load trading platform (10 minutes load time), low spreads which widen around weekends and active periods. Forum is quite helpful and actively hosted by the founders and directors of Oanda.

- Tricom

The best trading software I've yet seen in the FX arena. It loads fast, is stable and provides predictable trade price execution. Large product range with reasonable (but variable) spreads. Downside – had to spend five weeks setting up an account due to poor staff communication or interest. Called them at least once a week about my account details (they were disorganised and very dishonest to me about my account setup). I gave up on them after five weeks. Each trader at Tricom has to have an advisor, even to set up an account, which was the problem as the advisors seem much too busy to bother with this menial task. Thanks Eli M. you unfortunately wasted a lot of my time.

- IGMarkets

Higher than average spreads, and they implement price shading and slippage regularly costing the trader significantly, however they have a reliable interface and a large range of FX pairs. The trading platform is slow but I have found it encourages profitable trading through good, no nonsense, design.

The Worst:

- CMC Group

Trading System Software is very poorly designed yet they advertise it is award winning. In July 2004 (during my testing) their FX platform was down over 72 hours in one week and they were uninterested in doing anything about it. Overly complex background system which is very flimsy and unmaintained, they were basically nasty trying to sort out anything with them. Further, they put two CMC client traders, who were brothers, in Jail (CMC called the authorities) who accepted a significant risk on a trade and fortunately profited well – millions in fact – I assume CMC lost on this trade. The brothers were released after a short jail time and an investigation, and CMC offered to return their funds smugly. The CMC trading staff who were unjustified in calling the police still work for CMC, so avoid winning through CMC Group at all costs if you value your freedom. Genuinely they were nasty and arrogant to me, and likewise I was 'very' rude to them eventually. Arrogant, impossible people to do business with.

- Dukascopy

Firstly they keep 25% of your deposited funds for security which you cannot trade with. They are dishonest in my opinion (justified) and have consistently poor customer relations – they never give you there names in communications, and will not address hard questions They have the largest and most frequent slippage I've yet seen, 75 pips one-way) and boast about their status. Check it out if you're game.

- FXCM

This company (part of the Refco group) advertises more aggressively than any other MM, they have no special features and only 10 or so instruments which is the lowest anywhere. They unfortunately have a progressive slippage policy as stated by another MM director I spoke with. They are another MM who have dreadful customer service, won't answer you directly no matter how hard you try or how important it is. I will simply suggest don't trust them or don't bother with them. There are other issues I will try to add here later.

6 The Fallacy of Market Size

Quoted everywhere in the online FX world as being the largest market in the world. This is simply untrue. The

FX market is in fact smaller than most other well known markets like Futures or Equities. By removing Leverage value from FX trading statistics, thereby including only trader's 'real money' (which is all they can lose), and keeping separate the inclusion of all Game/Demo trades in their statistics (Most Market Makers have free Trading Demos), the Forex market is considerably smaller then other more popular trading markets. Further the Forex market is much less popular, assumed risky and I have found deceptive and dishonest than any other market in my 15 year trading experience. Betting on either Horse racing or at a Casino is in fact a much smarter (but obviously still against-the-odds) investment as well as more entertaining.

When a trader places a single trade on an individual instrument at a specific moment, he is (more often than realised) playing only against the Market Makers/Operators. There are probably only a few hundred private FX traders at any given time making a very few real trades (except during significant fundamental announcements), and a large number of currency instruments from which they may trade. The large government, corporate and institutional FX trades to my knowledge are not set at the current FX price, and cannot affect the market price directly. Otherwise a 3 Billion dollar corporate merger or acquisition as example, transferring 1 to 3 Billion dollars across international borders would in one hit, shift a currency price well over a thousand pips. This has never happened to my knowledge. Price shifting occurs as a method to manipulate the market in favor of those setting the prices and nothing else..

7 The Fallacy of Low Cost Trading

*Also see 'Losing Your Shirt – A List of Unseen Trading Costs' above.

Interest in the FX market is often borne of the apparent round-trip low cost of individual trades. This is in fact a fallacy as the purpose of this paper has already established, the real cost of a trade may be for example 0.37% where the advertised/apparent cost is 0.02% of a trade. Assuming you lose on the trade (average 82.5% of all private trades) removing margin from the equation, the real cost of this example trade is 0.37% times 50 (common leverage multiple) which equates to 18.5% of traders deposited funds per round trip. This is the trading reality over 80% of the time and greatly exceeds the cost to trade in all other common markets. Of course leverage works in the traders favour when he profits from a trade (< 20% of all FX trades.) The example quoted is typical but not obvious, and helps to explain why private traders funds are depleted so rapidly.

8 Can you win?

Since my first lengthy FX session in early 2004 where I broke even overall, despite my best efforts, I began to realise just what was required to profit from FX trading. Since this initial stage I have consistently made small profit, however realising that the 'actual' odds are stacked heavily and deceptively against the private trader, that a single large loss at any time may clear all profits made over many months or create a substantial loss. For this reason alone, I no longer trade individual FX pairs, and as arbitrague opportunities are rare and of low profit while still maintaining risk, I have concluded the only smart thing to do is to drop Forex trading permanently. At least until reasonable regulation of the market makes it possible to trade profitably. Having written this paper to try to inform other honest traders, releasing my FX-related software and source code for other to use if they wish, I will take my small FX winnings and return to the equities market or private business. I recommend you save yourself months or years of wasted time and do something which has a future for you and your family.

I haven't got all the answers as I trust you have realised, but I certainly have acquired a decent understanding of the dishonesty and deception underlying the Foreign Exchange market, and the under-rated odds against the individual trader which you will inevitably face if you continue to trade a non-institutional account with any of the Market Makers now operating.

Best of fortune in whatever financial path you choose to follow.

Conclusion

The Foreign Exchange Market implements complex financial and mathematical techniques to set prices. In 18 months of trading I have been unsuccessful in ascertaining any direct knowledge of the algorithms behind price variation (and I have asked), which in my view is fundamental to understanding the trader's investment selection and risk.

I have assessed the odds against an individual trader profiting overall from investing in the Foreign Exchange Market as being approx. 85%, which agrees with statements made by market commentators who have stated 80% and 85% as being the percentage of closed FX accounts which lose money overall.

In closing I urge you, before trading FX at a significant level, to understand your 'real' risk of trading. The idea that a random trade will produce near equal odds is definitely not the case in the FX market as your trade affects the market, and without question becomes a target for sophisticated price-manipulation techniques used by experienced market participants at several levels as explained above.

Do not be naïve, if you trade on this market be prepared to lose, unless you can outclass the banks, Market Makers and institutional investors exercising nearly 200 years of professional experience to take your money through deception and manipulation. It is as simple as that. There are times where you can win against the odds, but you should strive to understand what you are up against or you will probably be wasting your time and money.