Exotic Pairs and How They Tick

Many people avoid trading exotics for several reasons. They seem to be absolutely unpredictable and spend a great deal of time ranging aimlessly. Then suddenly for no apparent reason, they go shooting off wildly in a seemingly random direction. The regular indicators that are used on the Majors and Minors appear to not work very well with exotics.

In order to trade the exotics, one needs first to understand their makeup. By understanding their characteristics allows us to see the benefits that are available only with exotic pairs.

We are going to be using the New Zealand Dollar / Japanese Yen (NzdJpy) as a case study. As we can see from the Commodity/Buyer relationship of the NzdJpy pair, the Commodity (The New Zealand Dollar) is the currency that is being traded by the Buyer (The Japanese Yen).

The Price Formation of NzdJpy

The current Price of the NzdUsd is 0.7080, the UsdJpy is 93.456 and the NzdJpy is 66.169. The NzdUsd and the UsdJpy are what forms the NzdJpy exotic pair's price. To get the UsdJpy to be on the same page as the NzdUsd we need to get both to share the US dollar as their respective buyer. We need to convert the UsdJpy to JpyUsd.

The UsdJpy = 93.456 and the JpyUsd = 1/93.456 = 0.0107. One Japanese Yen is 0.0107 of a US Dollar. So 93.456 Japanese Yen x 0.0107 = 1 US Dollar.

Since the two pairs: NzdUsd and JpyUsd now share the same buyer, we use NzdUsd/JpyUsd to find the price of NzdJpy.

$$\frac{Nzd}{Usd} / \frac{Jpy}{Usd} = \frac{Nzd}{Jpy} = \text{Nzd/Jpy} = 0.7080/0.0107 = 66.16685$$

While the current price of NzdJpy is actually 66.169, the calculated price is 66.16685. The slight discrepancy is due to market fluctuations and is not something we need worry about.

Calculating The Numbers

NZDUSD	USDJPY	NZDJPY	Pip Change
0.7070	92.600	65.4682	16.32
0.7070	92.500	65.3975	9.25
0.7060	92.600	65.3756	7.06
0.7070	92.400	65.3268	2.18
0.7060	92.500	65.3050	0.00
0.7050	92.600	65.2830	-2.20
0.7060	92.400	65.2344	-7.06
0.7050	92.500	65.2125	-9.25
0.7050	92.400	65.1420	-16.30

Pip Ratio

NZDUSD	USDJPY
10	10

NZDUSD	0
USDJPY	0
NZDUSD	+ 10.00
USDJPY	+ 10.00
NZDUSD	- 10.00
USDJPY	- 10.00

This means that as the two primary parts of the NzdJpy fluctuate, the NzdUsd and the UsdJpy, they have a direct effect on the price of the NzdJpy.

If the NzdUsd is in a rising trend, while the UsdJpy is in a falling trend the NzdJpy moves very little. However if both are in a rising trend, The NzdJpy climbs at a rate greater than the two pairs that build it and vice versa on a dual down trend.

In the chart on your left, The Pip Ratio represents the movement range of the two primary pairs; NzdUsd and UsdJpy.
The Legend beneath that indicates the respective up and down movements of each pair shown in the left columns; NZDUSD and USDJPY respectively.
The NZDJPY column is the calculated price of the exotic pair, while the Pip Change column is the movement in pips created by the ups and downs of the forming pairs.

The two pairs NzdUsd and UsdJpy in general share an almost equal long term range of movement. They have primarily a one to one long term ratio in the timeframe we are calculating. So for Pip Ratio we use 10:10

To your right is a second chart also with an equal 10:10 Pip Ratio, but the base pair prices are further apart than the first chart. So the Pip movement that gets passed on to NzdJpy is substantially larger. For ease of seeing this think of the first charts prices as 70:92 while the second chart as 80:120. These two prices are taken from the charts. They are not guessed prices.

This knowledge can be used as a forecasting tool, but that is beyond the scope of this article.

The important aspect to keep in mind is that the primary pairs when trending in the same direction is what to seek for a profitable trade.

By looking at the three following daily charts, we can confirm that this is indeed the case.

NZDUSD	USDJPY	NZDJPY	Pip Change
0.8064	121.170	97.7115	20.17
0.8064	121.070	97.6308	12.11
0.8054	121.170	97.5903	8.05
0.8064	120.970	97.5502	4.04
0.8054	121.070	97.5098	0.00
0.8044	121.170	97.4691	-4.06
0.8054	120.970	97.4292	-8.05
0.8044	121.070	97.3887	-12.11
0.8044	120.970	97.3083	-20.15

Pip Ratio

NZDUSD	USDJPY
10	10

NZDUSD	0
USDJPY	0
NZDUSD	+ 10.00
USDJPY	+ 10.00
NZDUSD	- 10.00
USDJPY	- 10.00

The movement from 2007.07.24 to 2009.02.02 of NzdUsd is a fall of -2979 Pips, while UsdJpy falls -3141 Pips in the same time frame. Yet NzdJpy falls -5191 Pips.
That is close to the combined sum of the two primary pairs.

The calculated NzdJpy price using NzdUsd 0.80540, UsdJpy 121.070 start Prices and NzdUsd 0.50750, UsdJpy 89.667 end Prices,

      Gives us (0.50750/(1/89.667))=45.506 NzdJpy Price, while the actual Price is 45.530.

      2979/3141 gives us a 10:10.54 movement ratio between NzdUsd and UsdJpy.

The charts are split timewise into 6 segments, starting at 2007.07.24 and ending at 2009.10.21.

In the first segment, the primary pairs both went in the same direction. NzdUsd went down 1097 pips, while UsdJpy went down 661 pips. NzdJpy went down 1789 pips. It is rather close to equaling the sum of the pips moved in the primary pairs. (1097+661 = 1758). Also using the Pip Change showed on the second calculation chart above because here the price divergence of 80:120 is relevant, we find that (1097+661)/2*-2.015 (10:20.15 ratio) because both are going down = 1771 Pips calculated for a speculation of NzdJpy.

The second segment is similar but on the upswing. (753 +282 = 1035) and (753+285)/2*2.015=1045, where the true NzdJpy movement was 993.

In the third segment, this is not the case. While NzdUsd goes up 445 Pips, UsdJpy goes down 1854 Pips. (445-1854= -1409) and (445+1854)/2* 0.404 = 464. The sum of the primary pairs is way out, and so too us the calculation using the Pip Movements compared to the actual Pip movement of NzdJpy of -993. Notice the ratio of 10:10 movement is way out. 1854:445 = 4.16:1 so the calculated 464 x 4.16 = 1933.15 which is closer to the real pip movement of 1854. In hindsight, all the calculations will work out, but in the real time, one can only guess whether each primary pair will go up or down and by how much. Yet if one were looking at the charts after the primary pairs went opposite, one would know to stay clear or get out if already in an open position.

The fourth segment is the same as the third. The calculations come close to the mark but the sum of the primary pairs does not.

(-1224 +1055 = -167) while (1224+1055)/2* -0.404 = -460, while the actual NzdJpy was -475.

The fifth segment has the two pairs again going down. (-1856 -1962 = -3818) and Calculated (using the first calculation chart since the varience is moving more in the 70:90 direction)

(1856+1962)/2* -1.63 = -3111 while the true movement = 3022.

The final segment has the NzdUsd going up while UsdJpy is ranging. (2420 +97 = 2517) and Calculated

(2420+97)/2* 1.211 (10:12.11) = 1524, while the actual NzdJpy was 2241.

In conclusion. If both NzdUsd and UsdJpy are going down or up simultaneously, Get in there and trade! While if they are going in opposite directions, NzdJpy is going downwards, but not enough to get into a trade for. Similar when one of the two is ranging. Rather stay out.

The info and the charts can be used for a reasonable medium term forecast if both pairs are set in mid to long term trends. By knowing the end results of the variations of movement, one can trade any of the three pairs or none at all with a slight edge that most are not aware of.

I hope you enjoyed this article, and don't forget that these principles are valid for all the exotics. Although they each have their own characteristics, the fundamental concepts are the same.

NZDUSD Daily 2007.07.24 to 2009.02.02

- 0.80540
- 0.77180 (+753 Pips)
- 0.81550 (+445 Pips)
- 0.74954
- 0.69570 (-1097 Pips)
- 0.69310 (-1224 Pips)
- 0.80540 - 0.50750 = 2979 Pips
- 0.74950 = .50750 = 2420 Pips
- 0.50750
- 0.50750 (-1856 Pips)

USDJPY Daily 2007.07.24 to 2009.02.02

- 121.070
- 117.280 (+282 Pips)
- 109.290 (+1055)
- 114.460 (-661 Pips)
- 121.070 - 89.667 = 3141 Pips
- 90.641
- 98.740 (-1854 Pips)
- 89.667 (-1962 Pips)
- 89.667
- 90.641 - 89.667 = 97 Pips

NZDJPY Daily 2007.07.24 to 2009.02.02

- 97.500
- 90.430 (+1082 Pips)
- 79.610 (-1789 Pips)
- 80.500 (-993 Pips)
- 75.750 (-475 Pips)
- 97.500 - 45.530 = 5497 Pips
- 67.939
- 45.530
- 45.530 (-3022 Pips)
- 67.939 - 45.530 = 2241 Pips