

Diversification: The only free lunch in forex!

I cannot emphasize how important diversification is to your forex trading. You must diversify, plain and simple. If you don't, you're setting yourself up for failure.

Diversification is the only free lunch in the forex. When you diversify, you get something for nothing. The 'something' is less risk and potentially more reward. Diversification is one of the greatest tools you can use in your forex trading. Best of all, it's free!

Achieving diversification in the forex market, however, is a bit tricky. That's because you're limited to trading a handful of currency pairs.

You see, in the stock market you have thousands and thousands of stocks to choose from. You can buy all sorts of different types of stocks and ETFs and achieve diversification. Even the commodities markets offer a wider choice of trading vehicles with which you can achieve diversification. But even though it's a little tricky, diversification is very possible in the forex market.

Diversification is achieved in the forex by trading non-correlated pairs. You want to be holding positions, either long or short, in currency pairs that move somewhat independent of one another. The reason that you want this independence among your positions is in the event something changes quickly or goes wrong in your portfolio.

Let's say, for example, that you're extremely bearish on the U.S. dollar. You carefully conclude that the dollar is heading for a decline after studying the trends, signals on the point and figure charts, and macroeconomic factors. You're convinced that the dollar is going to drop.

You buy the EUR/USD, GBP/USD, AUD/USD, NZD/USD, and short the USD/CHF, USD/CAD, and USD/JPY. That's a total of seven trades, all of which are short the U.S. dollar. You're careful in managing your risk in each position and risk only 2 percent of your overall account equity when setting your stops.

But your error is not in the risk management of individual positions. It's the overall risk of the portfolio (of the 7 trades combined) that is of tremendous concern.

What happens if you're wrong and the dollar strengthens? You get stopped out of all seven trades at once for a 14 percent drawdown (7 trades x 2% risk per trade) in your account. That's a pretty big drawdown all because of trading too many highly correlated

positions. Each of the seven trades has the commonality of being short the dollar. Each one will suffer if the dollar strengthens.

You've noticed how different currency pairs tend to follow one another to varying degrees. This is correlation. One of the most obvious examples is the relationship between the AUD/USD and NZD/USD. Australia and New Zealand are connected economically; they are close geographically; their currencies are highly correlated.

Have you noticed that when the AUD/USD goes up the NZD/USD tends to go up too? Have you seen when the AUD/USD goes down the NZD/USD tends to follow? Take a look at the comparison chart of the AUD/USD and NZD/USD in **Figure 1**. It spans 200 trading days and displays the percentage performance of both currencies.

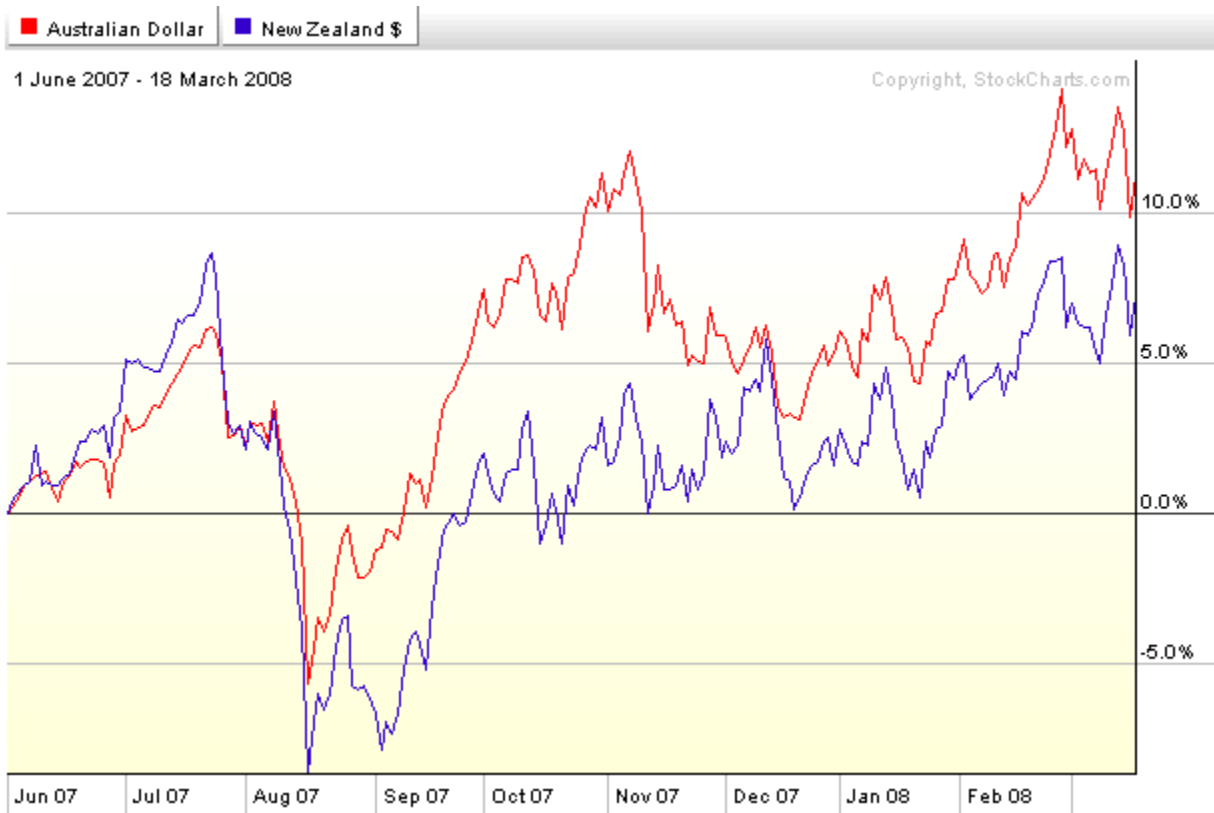


Figure 1

Notice how the Aussie and Kiwi tend to trend in the same direction in **Figure 1** over short and long periods of time. They're essentially the same. In fact, the AUD/USD and NZD/USD share a correlation of about 90 percent over the past five years. That's just a fancy way of saying when the AUD/USD goes up by 100 pips the NZD/USD will usually go up by about 90 pips. When the AUD/USD drops by 100 pips the NZD/USD will normally go down by 90 pips.

All currency pairs are linked in the forex to varying degrees. But this linkage, or correlation, varies quite a bit from pair to pair. To achieve diversification, you want to trade a group of currencies that are not linked too closely. Put another way, you want to trade pairs that move with as much independence as possible.

There's a way to precisely calculate this independence and it's through correlations. This is a statistical calculation that measures the linkage between one data set and another. In this case, the data sets are historical exchange rates.

To calculate the correlation of two currency pairs, all you need to do is run the formula over a historical set of rates. I always use daily data for this calculation and try to go back at least a couple of years.

The correlations between two currency pairs will range between -1 and 1. You might see a correlation of 0.95 or -0.37 or 0.01. A correlation of, or near, 1 means that the two currency pairs are very closely linked. They will move in almost perfect lock step, higher and lower, with one another. A correlation of, or near, -1 means that the two currency pairs are mirror images of one another; that they move almost perfectly in opposite directions.

A good example of a strong negative correlation is between the EUR/USD and USD/CHF, which has a correlation of -0.93 over the past five years. Quite simply, when the EUR/USD goes up by 100 pips the USD/CHF tends to drop by 93 pips. When the EUR/USD drops by 100 pips the USD/CHF normally rallies by 93 pips.

The smaller the correlation, either negative or positive, the more independence there is between two currency pairs. Put another way, the closer the correlation is to zero, the less linked are the pairs. You're never going to see a correlation of exactly zero, but there are a few pairs that are pretty close. As an example, the AUD/USD and USD/JPY have a correlation of 0.03 over the past five years. Surprisingly, these two pairs move independently of one another even though they both involve the U.S. dollar. This low correlation makes the AUD/USD and USD/JPY good pairs to trade at the same time.

I've made the process of determining the correlation of the most commonly traded pairs pretty easy. I've taken the 14 most commonly traded pairs and built a correlation table that you can use for a quick reference. The data span over five years, and although there will be some changes in the future, you can use this table for years to come as a reference. (**See Figure 2**)

	EUR/USD	EUR/JPY	EUR/GBP	EUR/CHF	CHF/JPY	AUD/USD	AUD/JPY	GBP/CHF	GBP/JPY	GBP/USD	USD/CAD	USD/CHF	USD/JPY	NZD/USD
EUR/USD	1.00	0.80	0.53	0.70	0.79	0.93	0.73	0.12	0.61	0.91	-0.78	-0.93	-0.08	0.82
EUR/JPY	0.80	1.00	0.21	0.91	0.98	0.81	0.96	0.53	0.94	0.83	-0.86	-0.58	0.53	0.65
EUR/GBP	0.53	0.21	1.00	0.16	0.22	0.46	0.17	-0.66	-0.14	0.13	-0.39	-0.54	-0.36	0.38
EUR/CHF	0.70	0.91	0.16	1.00	0.81	0.76	0.92	0.63	0.87	0.74	-0.74	-0.40	0.52	0.58
CHF/JPY	0.79	0.98	0.22	0.81	1.00	0.78	0.92	0.45	0.91	0.82	-0.87	-0.62	0.51	0.64
AUD/USD	0.93	0.81	0.46	0.76	0.78	1.00	0.84	0.22	0.65	0.86	-0.83	-0.81	0.03	0.89
AUD/JPY	0.73	0.96	0.17	0.92	0.92	0.84	1.00	0.57	0.91	0.77	-0.86	-0.49	0.55	0.71
GBP/CHF	0.12	0.53	-0.66	0.63	0.45	0.22	0.57	1.00	0.77	0.47	-0.26	0.11	0.68	0.15
GBP/JPY	0.61	0.94	-0.14	0.87	0.91	0.65	0.91	0.77	1.00	0.79	-0.73	-0.39	0.67	0.52
GBP/USD	0.91	0.83	0.13	0.74	0.82	0.86	0.77	0.47	0.79	1.00	-0.72	-0.82	0.09	0.76
USD/CAD	-0.78	-0.86	-0.39	-0.74	-0.87	-0.83	-0.86	-0.26	-0.73	-0.72	1.00	0.64	-0.34	-0.67
USD/CHF	-0.93	-0.58	-0.54	-0.40	-0.62	-0.81	-0.49	0.11	-0.39	-0.82	0.64	1.00	0.35	-0.76
USD/JPY	-0.08	0.53	-0.36	0.52	0.51	0.03	0.55	0.68	0.67	0.09	-0.34	0.35	1.00	-0.07
NZD/USD	0.82	0.65	0.38	0.58	0.64	0.89	0.71	0.15	0.52	0.76	-0.67	-0.76	-0.07	1.00

Figure 2

You can use the correlation table in **Figure 2** to quickly determine if you're diversified among your positions. Simply find the correlation between the pairs you're holding. Start by looking for one pair in the left column of the chart and then move across row until you find the column that intersects with another currency pair at the top of the chart. Look for low correlations among the pairs. Try to stick with pairs that have a correlation of -0.50 or 0.50, or less.

If you do find that you're holding a lot of highly correlated positions, then take the step to reduce risk at the individual position level by trading smaller position sizes or using tighter stops.

Historical Correlations

The correlation table in **Figure 2** is an invaluable resource. Every forex trader should keep one at their trading terminal.

The table I've created obviously isn't all inclusive. There are many more pairs that you can include in a correlation table. I strongly encourage you to perform your own correlation studies. You'll be surprised at what you find. For instance, you'll discover some very interesting characteristics among the emerging market currencies.

For the most part, you'll want to stay diversified in your trading and follow the correlations pretty closely. Most of the big trends, both short-term and long-term, that form in the forex overlap across the different pairs. For example, when the greenback is weakening it tends to do so against most foreign currencies. You want to identify and follow these trends while at the same time never over-leveraging or extending your risk. Trends can end rather abruptly, but you can mitigate the risk of these reversals by staying diversified.

There will be times, however, when the correlations break down over short periods of time usually due to extreme changes in macroeconomic variables. For instance, I remember a period when traders were extremely worried about a growing deficit in New Zealand. At the same time, the Reserve Bank of New Zealand was talking about cutting interest rates. So, for about six months, the NZD weakened dramatically against all other currencies. Meanwhile, the AUD wasn't affected by the same variables. So while the NZD/USD was trending sharply lower, the AUD/USD was just bouncing around in a trading range. The historical correlation between the AUD/USD and NZD/USD broke down during these six months.

The breakdowns in correlations can often reveal an important change in macroeconomic variables. Be on the lookout for these breakdowns because they can lead to huge moves in currency pairs. But be very careful not to read too much into changes in correlations from day to day or even week to week. The breakdowns in correlations, and the accompanying changes in macroeconomic variables, usually play out over months. Furthermore, they are rare occurrences. You don't want to get in the habit of looking at every little blip as a breakdown in a historical correlation. The historical correlations are very accurate the vast majority of the time.