TRADENCY

How to create a Portfolio of strategies?

A portfolio is an appropriate mix of trading strategies that has the goal to maximize returns while keeping risk at an acceptable level. The risk of a trading strategy is the Maximum Draw Down: the largest peak-to-trough decline of a strategy over its entire history. This can be expressed in percentage or in pips. The level of draw down that you are willing to sustain is something you should decide for yourself before you start trading.

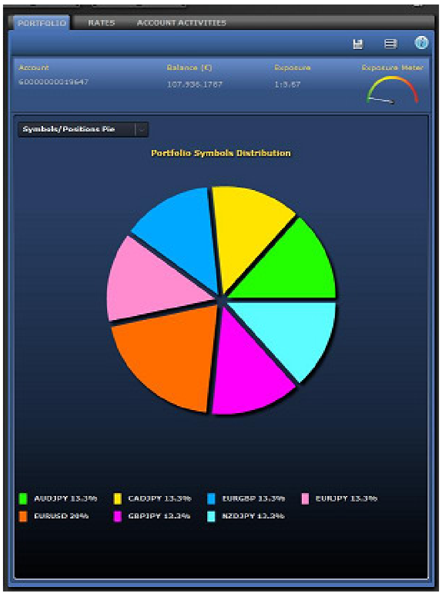
If you create a portfolio, you have to become a coach of your own team. Picking the best systems is necessary to get a good portfolio performance, but it is not enough. Just like a coach of a team, it is your job to make the systems work together and to let the portfolio become more than the sum of its parts. Diversification is the key and there are 3 important ways to do it:

1) **Correlation**

   Correlation is the degree of linear association of 2 currency pairs. Or in plain English, it is a number between -1 and 1 that tells you if 2 currency pairs typically move in the same direction or not. The closer this number is to 1, the more similar 2 currency pairs are. If you build a portfolio with only highly correlated currency pairs, the risk is that all your systems make a loss at the same time, causing a big dip in your equity curve. One of the properties of the market is that correlation between 2 currency pairs changes over time. Before you select a strategy, take a look at which currency pairs you already have in your portfolio. Try to diversify as much as possible, and **trade on uncorrelated currency pairs**. This can help to create a smoother equity curve for your portfolio.

2) **Base currencies of the pairs**

   Next to selecting uncorrelated currency pairs, it is also important to diversify the base currencies. Let's say our portfolio contains strategies on the following currency pairs: EUR/CHF, EUR/USD, EUR/JPY and EUR/GBP. Do you see what is wrong with this picture? The base currency is the euro for all strategies in the portfolio! What happens if the ECB totally unexpectedly raises its interest rate with 1% and your strategies happen to be short EUR? **Diversifying the base currencies protects you from excessive volatility** due to unexpected news.

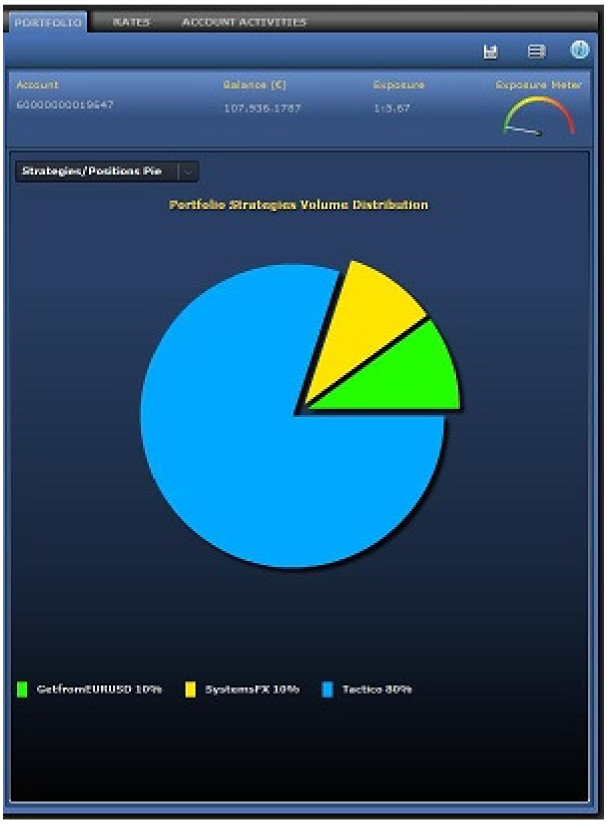


3) Type of strategy

Typically we can find 3 big categories of trading strategies:

- Trend following
- Range trading
- Break-out

In fact, there are as many trading strategies as there are traders. Some strategies will work well in some types of markets, others will not: trend-following and break-out strategies will underperform during a long period of ranging price action. A range trading system will not give you the desired results in a period of strong trends. The nature of the market is that it changes all the time. Volatility, trends, correlation and many other aspects of the market change all the time. If you can find a variety of systems that use different methodologies you will probably get a smoother equity curve, so try to **diversify across methodologies**. Unfortunately, the perfect strategy that always works in every market and every timeframe does not exist. No matter what some system vendors on the internet may claim.



When to stop trading a strategy

Trading is the opposite of gambling. There is an aspect of uncertainty, but if you have probability on your side and you use the correct amount of leverage, the odds are stacked in your favor. Nevertheless it is always possible that a system that was robust in the past suddenly stops working.
The industrious trader can calculate confidence intervals of statistics of the past performance and compare this to the recent performance of the strategy to see if performance is breaking down or not, but there is a simpler way. I like to use historical Maximum Draw Down. **If the strategy loses more than 2 times the historical maximum draw down**, the alarm bells should start ringing. **Before you start trading a strategy, set this stop** in your mind or write it down on paper. You should know where you will stop trading the strategy before it goes live in your portfolio. If you do this, and if things turn ugly, you do not have to worry about what to do next because you already know and the only thing you have to do is react. This is good because it can be hard to think rationally if you are in a losing streak. Most traders tend to forget that if you remove a strategy from your portfolio too quickly, you will often miss out on future gains. That is why it is important to select stable, long term profitable strategies that have a maximum draw down that is acceptable for your trading account. The strategies with the highest potential future profits will be the ones that have been the most robust over the longest period of time.

Conclusion

Try to trade on uncorrelated currency pairs, diversify the base currencies and methodologies. And before you start trading a strategy, set a mental stop at 2 times the historical maximum draw down. Even the best money managers have losing periods. If you can accept this, you can use it to your advantage and create a portfolio with a relatively smooth equity curve.