1
Cross-Asset Trend Following with Futures

There is a group of hedge funds and professional asset managers who have shown a remarkable performance for over 30 years, consistently outperforming conventional strategies in both bull and bear markets, and during the 2008 credit crunch crisis showing truly spectacular returns. These traders are highly secretive about what they do and how they do it. They often employ large quant teams staffed with top-level PhDs from the best schools in the world, adding to the mystique surrounding their seemingly amazing long-term track records. Yet, as this book shows, it is possible to replicate their returns by using fairly simple systematic trading models, revealing that not only are they essentially doing the same thing, but also that it is not terribly complex and within the reach of most of us to replicate.

This group of funds and traders goes by several names and they are often referred to as CTAs (for Commodity Trading Advisors), trend followers or managed futures traders. It matters little which term you prefer because there really are no standardised rules or definitions involved. What they all have in common is that their primary trading strategy is to capture lasting price moves in either direction in global markets across many asset classes, attempting to ride positions as long as possible when they start moving. In practice most futures managers do the same thing they have been doing since the 1970s: trend following. Conceptually the core idea is very simple. Use computer software to identify trends in a large set of different futures markets and attempt to enter into trends and follow them for as long as they last. By following a large number of markets covering all asset classes, both long and short, you can make money in both bull and bear markets and be sure to capture any lasting trend in the financial markets, regardless of asset class.

This book shows all the details about what this group does in reality and how the members do it.

The truth is that almost all of these funds are just following trends and there are not a whole lot of ways that this can be done. They all have their own proprietary tweaks, bells and whistles, but in the end the difference achieved by these is marginal in the grand scheme of things. This book sheds some light on what the large institutional trend-following futures traders do and how the results are created. The strategies as such are relatively simple and not terribly difficult to replicate in theory, but that in no way means that it is easy to replicate them in reality and to follow through. The difficulty of managed futures trading is largely misunderstood and those trying to replicate what we do usually spend too much time looking at the wrong things and not even realising the actual difficulties until it is too late. Strategies are easy. Sticking with them in reality is a whole different ball game. That may sound clichéd but come back to that statement after you finish reading this book and see if you still believe it is just a cliché.

There are many names given to the strategies and the business that this book is about and, although they are often used interchangeably, in practice they can sometimes mean slightly different things and cause all kinds of confusion. The most commonly-used term by industry professionals is simply CTA (Commodity Trading Advisor) and though I admit that I tend to use this term myself it is in fact a misnomer in this case. CTA is a US regulatory term defined by the National Futures Association (NFA) and it has little to do with most so-called CTA funds or CTA managers today. This label is a legacy from the days when those running these types of strategies were US-based individuals or small companies regulated onshore by the NFA, which is not necessarily the case today. If you live in the UK and have your advisory company in London, set up an asset-management company in the British Virgin Islands and a hedge fund in the Caymans (which is in fact a more common setup than one would think) you are in no way affected by the NFA and therefore not a CTA from their point of view, even if you manage futures in large scale.

DIVERSIFIED TREND FOLLOWING IN A NUTSHELL

The very concept of trend following means that you will never buy at the bottom and you will never sell at the top. This is not about buying low and selling high, but rather about buying high and selling higher or shorting low and covering lower. These strategies will always arrive late at the party and overstay their welcome, but they always enjoy the fun in-between. All trend-following strategies are the same in concept and the underlying core idea is that the financial markets tend to move in trends, up, down or sideways, for extended periods of time. Perhaps not all the time and perhaps not even most of the time, but the critical assumption is that there will always be periods where markets continue to move in the same direction for long enough periods of time to pay for the losing trades and have money left over. It is in these periods and only in these periods that trend-following strategies will make money. When the market is moving sideways, which is the case more often than one might think, these strategies are just not profitable.

Figure 1.1 Phases of trend following

Figure 1.1 shows the type of trades we are looking for, which all boils down to waiting until the market has made a significant move in one direction, putting on a bet that the price will continue in the same direction and holding that position until the trend has seized. Note the two phases in the figure separated by a vertical line. Up until April there was no money to be made in following the trends of the NZ Dollar, simply because there were no trends around. Many trend followers would have attempted entries both on the long and short side and lost money, but the emerging trend from April onwards should have paid for it and then some.

If you look at a single market at any given time, there is a very high likelihood that no trend exists at the moment. That not only means that there are no profits for the trend-following strategies, but can also mean that loss after loss is realised as the strategy enters position after position only to see prices fall back into the old range. Trend-following trading on a single instrument is not terribly difficult but quite often a futile exercise, not to mention a very expensive one. Any single instrument or even asset class can have very long periods where this approach simply does not work and to keep losing over and over again, watching the portfolio value shrinking each time can be a horrible experience as well as financially disastrous. Those who trade only a single or a few markets also have a higher tendency of taking too large bets to make sure the bottom line of the portfolio will get a significant impact of each trade and that is also an excellent method of going bankrupt.

With a diversified futures strategy you have a large basket of instruments to trade covering all major asset classes, making each single bet by itself almost insignificant to the overall performance. Most trend-following futures strategies do in fact lose on over half of all trades entered and sometimes as much as 70%, but the trick is to gain much more on the good ones than you lose on the bad and to do enough trades for the law of big numbers to start kicking in.

For a truly diversified futures manager it really does not matter if we trade the S&P 500 Index, rough rice, bonds, gold or even live hogs. They are all just futures which can be treated in exactly the same way. Using historical data for long enough time periods we can analyse the behaviour of each market and have our strategy adapt to the volatility and characteristics of each market, making sure we build a robust and truly diversified portfolio.

THE TRADITIONAL INVESTMENT APPROACH

The most widely held asset class, in particular among the general public, is equities; that is, shares of corporations trading on stock exchanges. The academic community along with most large banks and financial institutions have long told the public that buying and holding equities over long periods of time is a safe and prudent method of investing and this has created a huge market for equity mutual funds. These funds are generally seen as responsible long-term investments that always go up in the long run, and there is a good chance that even a large part of your pension plan is invested in equity mutual funds for that very reason. The ubiquitous advice from banks is that you should hold a combination of equity mutual funds and bond mutual funds and that the younger you are, the larger the weight of the equity funds should be. The reason for the last part is that, although equities do tend to go up in the long run, they are more volatile than bonds and you should take higher financial risks when you are younger since you have time to make your losses back. Furthermore, the advice is generally that you should prefer equity mutual funds over buying single stocks to make sure that you get sufficient diversification and you participate in the overall market instead of taking bets on individual companies which may run into unexpected trouble down the road.

This all sounds very reasonable and makes for a good sales pitch, at least if the core assumption of equities always appreciating over time holds up in reality. The idea of diversifying by holding many stocks instead of just a few companies also sounds very reasonable, given that the assumption holds up that the correlation between stocks is low enough to provide the desired diversification benefits of lower risk at equal or higher returns. Of course, if either of these assumptions turn out to be disappointing in reality, the whole strategy risks falling like a proverbial house of cards.

In reality, equities as an asset class has a very high internal correlation compared to most other types of instruments. The prices of stocks tend to move together up and down on the same days and while there are large differences in overall returns between a good stock and a bad one, over longer time horizons the timing of their positive and negative days are often highly related even in normal markets. If you hold a large basket of stocks in many different countries and sectors, you still just hold stocks and the extent of your diversification is very much limited. The larger problem with the diversification starts creeping up in times of market distress or when there is a single fundamental theme that drives the market as a whole. This could be a longer-term event such as a dot com bubble and crash, a banking sector meltdown and so on, or it can be a shorter-term shock event like an earthquake or a surprise breakout of war. When the market gets single-minded, the correlations between stocks quickly approach one as everyone panic sells at the same time and then re-buys on the same euphoria when the problems are perceived to be lessened. In these markets it matters little what stocks you hold and the diversification of your portfolio will turn out to be a very expensive illusion.

Then again, if stocks always go up in the long run the correlations should be of lesser importance since you would always make the money back again if you just sit on the stocks and wait a little bit longer. This is absolutely true and if you are a very patient person you are very likely to make money from the stock markets by just buying and holding. From 1976 to 2011 the MSCI World Index rose by 1,300%, so in 35 years you would have made over ten times your initial investment. Of course, if you translate that into annual compound return you will see that this means a yield of just around 8% per year. If you had been so unlucky as to invest in 1999 instead, you would still hold a loss 13 years later of over 20%. Had you invested in 2007 your loss would be even greater. Although equities do tend to move up in the long run, most of us cannot afford to lose a large part of our capital and wait for a half a lifetime to get our money back. If you are lucky and invest in a good year or even a good decade, the buy-and-hold strategy may work out but it can also turn out to be a really bumpy ride for quite a low return in the end. Going back to the 1,000% or so made on an investment from 1976 to 2011, the largest drawdown during this period was 55%. Looking at the buy-and-hold strategy from a long-term return to risk perspective, that means that in order to get your 8% or so return per year, you must accept a risk of losing more than half of your capital, which would translate to close to seven years of average return.

You may say that the 55% loss represents only one extreme event, the 2008 credit meltdown, and that such scenarios are unlikely to repeat, but this is not at all the case. Let's just look at the fairly recent history of these so-called once-in-a-lifetime events. In 1974 the Dow Jones Industrial average hit a drawdown of 40%, which took over six years to recover. In 1978 the same index fell 27% in a little over a year. The same thing happened again in 1982 when the losses amounted to 25% in about a year. From the peak in August 1987 to the bottom in October the index lost over 40%. Despite the bull market of the 1990s, there were several 15–20% loss periods and when the markets turned down in 2000 the index had lost about 40% before hitting the bottom. What you need to ask yourself is just how high an expected compound return you need to compensate for the high risks of the stock markets, and whether you are happy with single digit returns for that level of volatility.

If you do choose to participate in the stock markets through an equity mutual fund you have one more factor to consider, and that is whether or not the mutual fund can match or beat the index it is supposed to be tracking. A mutual-fund manager, as opposed to a hedge-fund manager, is tasked with trying to beat a specific index and in the case of an equity fund that index would be something like the S&P 500, FTSE 100, MSCI World or similar. It can be a broad country index, international index, sector index or any other kind of equity index, but the task is to follow the designated index and attempt to beat it. Most mutual-fund managers have very little leeway in their investment approach and they are not allowed to deviate much from their index. Methods to attempt to beat the index could involve slight over- or under-weights in stocks that the manager believes will perform better or worse than the index, or to hold a little more cash during perceived bad markets. The really big difference between a mutual-fund manager and a hedge-fund manager or absolute-return trader is that the mutual-fund manager's job is to follow the index, whether it goes up or down. That person's job is not to make money for the client but rather to attempt to make sure that the client gets the return of the index and it is hoped slightly more. If the S&P 500 index declines by 30% in a year, and a mutual fund using that index as a benchmark loses only 25% of the clients' money, that is a big achievement and the fund manager has done a very good job.

There are of course fees to be paid, including a management fee and sometimes a performance fee for the fund as well as administration fees, custody fees, commissions and so on, which is the reason why very few mutual funds manage to beat their index or even match it. According to Standard & Poor's Indices Versus Active Funds Scorecard (SPIVA) 2011 report, the percentage of US domestic equity funds that outperformed the benchmark in 2011 was less than 16%. Worst that year were the large-cap growth funds where over 95% failed to beat their benchmark. Looking over a period of five years, from 2006 to 2011, 62% of all US domestic funds failed to beat their benchmarks. Worst in that five-year period was the mid-cap growth funds where less than 10% reached their targets. The picture that the S&P reports paint is devastating for the mutual-fund business. If active mutual funds have consistently proved to underperform their benchmarks year after year, there is little reason to think that this is about to change any time soon.

There are times when it's a good idea to participate in the general equity markets by buying and holding for extended periods of time, but then you need to have a strategy for when to get out of the markets when the big declines come along, because they will come along. It makes sense to have a portion of your money in equities one way or another as long as you step out of that market during the extremely volatile and troublesome years, but I'm personally not entirely convinced about the wisdom of putting the bulk of your hard-earned cash into this asset class and just holding onto it in up and down markets, hoping for the best. For participating in these markets, you may also want to consider investing in passive exchange-traded funds (ETFs) as an alternative to classic mutual funds, because the index-tracking ETFs hold the exact stocks of the index at all times and have substantially lower fees, making them track and match the index with a very high degree of precision. They are also very easy and cheap to buy and sell as they are directly traded on an exchange with up-to-the-second pricing.

THE CASE FOR DIVERSIFIED MANAGED FUTURES

There are many viable investment strategies that tend to outperform buy-and-hold equities on a volatility adjusted basis and I employ several of them. One of the top strategies is trend-following managed futures for its consistent long-term track record of providing a very good return-to-risk ratio during both bull and bear years. A solid managed futures strategy has a reasonably high expected yearly return, acceptable drawdown in relation to the yearly return and lack of significant correlation to world equity markets, and preferably slightly negative correlation.

The list of successful traders and hedge funds operating in the trend-following managed futures markets is quite long and many of them have been around for decades, some even from the 1970s. The very fact that so many trend traders have managed not only to stay in business for this long period, but to also make consistently impressive returns, should in itself prove that these strategies work.

Table 1.1 shows a brief comparison between the performances of some futures managers to that of the world equity markets. As mentioned, MSCI World has shown a long-term yield of 8% with a maximum drawdown (DD) of 55%, which would

Table 1.1 Performance comparison

	Ann. compound return (%)	Max DD (%)	Correlation to MSCI World	Starting date
MSCI World Total Return	8.0	–55.0		Feb-77
Millburn Multi Markets	16.6	–25.6	–0.01	Feb-77
Dunn World Monetary and Agriculture	14.4	–60.3	–0.03	Nov-84
Hyman Beck Global Portfolio	11.1	–29.3	–0.10	Apr-91
SuperFund Green Q AG	12.1	–32.8	–0.05	Mar-96
Mulvaney Global Markets Fund	15.4	–41.3	–0.16	May-99
Transtrend Standard Risk	9.8	–10.9	–0.05	Jun-92
Sunrise Expanded Diversified	11.9	–19.9	–0.13	Jan-96
Winton Futures Fund B	16.2	–25.6	0.00	Oct-97
Rabar Market Research Diversified Program	12.9	–29.8	0.01	Jan-89
Clarke Capital Management Worldwide	13.8	–26.6	–0.11	Jan-96
Chesapeake Capital Diversified	12.8	–27.8	0.15	Feb-88
Abraham Trading Company Diversified Program	18.7	–32.0	–0.08	Jan-88
Estlander & Partners, Alpha Trend	12.1	–16.5	0.08	Oct-91

mean that over seven normal years of performance were given up in that decline. This could be compared with funds like Millburn, which over the same period had a return of 17% and only gave up 26% at the most, or the equivalent of one and a half years only. Transtrend gave up even less of its return and even Dunn, which after a stellar track record suffered a setback a few years ago, only lost four years of performance and still holds a much higher compound rate of return than the equity index.

Looking at the funds' correlation to MSCI World you should notice that none of them have any significant correlation at all. This means that with such a strategy, you really don't have to worry about whether the world equity markets are going up or down since it makes little difference to your returns. It does not mean that all years are positive for diversified futures strategies, only that the timing of the positive and negative returns is, over time, unrelated to those of the equity market. The observant reader might be asking if that does not make these strategies a very good complement to an equity portfolio, and the answer is that it absolutely does, but we are getting ahead of ourselves here.

CRITICISM OF TREND-FOLLOWING STRATEGIES

Although certain criticisms of trend-following trading have some validity, there are other commonly recurring arguments that may be a little less thought through. One somewhat valid criticism is that there is a survival bias in the numbers reported by the industry. The argument is that the funds that are part of the relevant indices and comparisons are only there because they did well and the funds that did not do well are either out of business or too small to be part of the indices, and that this effect makes the indices have a positive bias. This is of course a factor, much the same way as a stock can be knocked out of the S&P 500 Index after it had bad performance and its market capitalisation shrunk. Survival bias is a fact of life with all indices and it makes them all look a little better than reality would dictate. This is not an asset class specific problem. Anyhow, the arguments made in this book regarding the performance of diversified futures strategies are not dependent on the performance of indices; the comparisons asset managers included consist of a broad range of big players, some of which had some really difficult periods in their track records. There are some excellent aspects of these strategies and there are some serious pitfalls and potential problems that you need to be aware of. I deal with all of these in this book and have no intention of painting a rosier picture of the real situation than my experience reflects. Doing so would be both counterproductive and also, quite frankly, unnecessary.

Another common argument is that the high leverage makes the strategy too risky. This is mostly based on a lack of understanding of the two concepts of leverage and risk, which are not necessarily related. Defining leverage is a tricky thing when you deal with cross-asset futures strategies and simply adding up notional contract values and dividing with the capital base simply does not cut it. As I demonstrate and explain further on, having a million pounds' worth of exposure to gold and having a million pounds' worth of exposure to the Euribor is a world apart in terms of actual risk. While gold often moves several per cent in a day, a normal move in the Euribor would be a couple of basis points. Sure, these futures strategies may have quite high notional contract exposures but don't go confusing that with risk. To be sure, these strategies can be risky, but buying and holding a portfolio of stocks is not necessarily less risky.

Most trend-following futures strategies will need to sell short quite often, and often as much as you buy long. Critics would highlight that when you are short you have an unlimited potential risk, which again is a misunderstanding of how markets work. Just as with equities, you risk losing what you put on the table but not more than that. While the pay-out diagram for a futures contract in theory has an unlimited loss, unless you have an unlimited amount of margin capital in your account this is simply not the case in reality. In my experience, it is harder to trade on the short side than the long side, but that does not necessarily make it riskier, in particular when done in the context of a large diversified portfolio. Rather, on the contrary, the ability to go short tends to provide a higher skew of the return distributions and thereby increase the attractiveness as a hedging strategy.

Managed futures funds sometimes have large and long-lasting drawdowns. This is an absolutely valid criticism and something you need to be very aware of before setting out on this path. People like to hear percentage numbers, such as a common drawdown is 20% for example, but this is not really helpful since you can tweak the risk factor up and down as you please by adjusting position sizes, as I explain in detail in later chapters. The question should rather be whether the long-term return numbers compensate for the worst drawdown scenarios and in this case it is hard to argue with the numbers. Drawdowns are painful when they occur but to say that they are worse than for the classic buy-and-hold equity alternative would be untrue. At the bottom of the equity bear market of 2008, based on MSCI World, you would have lost 55% from the peak and gone back to the levels of the mid-1990s. Losing almost 15 years of accumulated gains is practically unheard of for diversified futures strategies, yet the buy-and-hold strategy is considered by many the safer alternative.

Of course, just because a strategy worked for the past 30 to 40 years does not necessarily mean it has to work in the next decade or two. We are not dealing with mathematical certainties here and we are not trying to predict the future. What we are doing is try to tilt the probabilities slightly in our favour and then repeat the same thing over and over a large number of times. There will be years that are very bad for trend followers and there will be very good years. Over time the strategy is highly likely to produce strong absolute returns and to outperform traditional investment methods, but we are dealing in probabilities and not in certainties. There are no guarantees in this business, regardless of what strategy you choose. I don't expect any major problems that would end the profitable reign of trend-following futures trading, but it would be arrogant not to admit that the dinosaurs probably did not expect a huge stone to fall from the sky and end their party either. Neither event is very likely but both are quite possible.

MANAGED FUTURES AS A BUSINESS

This book primarily deals with how to trade trend-following futures strategies as a money manager, trading other people's money, and it would be fair to wonder why one would want to share the profits with others. Some would take the view that once you have a good strategy with dependable long-term results, you should keep it to yourself and only trade your own money. There are instances where this may be true, in particular with strategies that are not scalable and have to be traded in low volume. For a truly scalable strategy, however, there is no real downside to sharing the spoils and quite a bit to be gained.

For starters, you need a large capital base to trade trend-following futures with sufficient diversification and reasonably low volatility, and even if you master the trading side you may not have the couple of million pounds required to achieve a high level of diversification with acceptable risk. Pooling your money with that of other people would then make perfect sense. Given that you can charge other people for managing their money along with your own makes the prospect even more appealing, because it gives you an income while you do the same work you might have done yourself anyhow, and apart from your own gains you participate in your clients' trading gains as well.

If you go the hedge-fund route and accept external money to be pooled with your own and traded like a single account, the overall workload increase is quite minor on a daily basis but your earning potential dramatically goes up. If you choose to manage individual accounts you may get a little higher workload on the admin side but a quicker and cheaper start-up phase and the economic upside is essentially the same. For starters you will have a reasonably stable income from the management fee which allows you to focus on long-term results. This strategy requires patience and if you feel economic pressure to achieve profitable trading each month, this will not work out. There can be long periods of sideways or negative trading and you need to be able to stick it out in those periods. Your incentive should always be towards long-term strong positive returns while keeping drawdowns at acceptable levels. As you get a percentage of the profits created on behalf of external investors, the earning potential in good years vastly exceeds what you could achieve with your own money alone.

If you have US$100,000 and make a 20% return one year you just made US$20,000, which is great for sure. But if you also have US$1 million of external investor money in the pot and charge a management fee of 1.5% and a performance fee of 15%, you just made another US$30,000 in performance fee as well as over US$15,000 in management fee. By doing the same trades on a larger portfolio you make US$65,000 instead of US$20,000, and the beauty of managed futures trend following is that it is very scalable and you can keep piling up very large sums of external money and still trade basically the same way with very little additional work.

Managing external money means that you have a fiduciary responsibility not only to stick strictly to the strategy you have been given the mandate to trade, but also to create relevant reports and analyses and keep proper paperwork. This may seem like a chore but the added required diligence should be a good thing and ensure that you act in a professional manner at all times.

The negative part with managing other people's money is that you have a little less freedom, because you need to stick to the plans and principles that you have sold to your investors. You likely need to take lower risk than you would have done with your own account as well. Some traders who just manage their own money may be fine with the prospect of losing 60–70% of the capital base in return for potential triple-digit annual returns, but this is a very tough sell for a professional money manager. Investors, and in particular institutional investors with deep pockets, tend to prefer lower returns with lower risks.

The business of managing futures can be a highly profitable one if done carefully and with proper planning. There are a large number of famous traders who have achieved remarkable results in this field since the 1970s and the number of public funds in this space keeps increasing.

From a business point of view the deal is quite straightforward compared to most other types of enterprises. A little simplified, it could be described in these steps:

1. Find clients to invest money with you.
2. Trade futures on their behalf.
3. Charge clients a yearly fixed fee for managing their money, usually 1–2%.
4. Charge clients a yearly performance fee if you make money for them, usually 10–20% of the profits.

The nicest part of this business model is that it is no more difficult to manage US$20 million than to manage US$10 million; your cost base would be more or less the same but your revenues would double. This business model is very scalable and until you reach a very large asset base you can use the same strategies in the same manner and just adjust your position sizes. Once you reach US$500 million to US$1 billion, you will for sure get a whole new set of problems when it comes to asset allocation and liquidity, but that is rather a pleasant problem to have.

When first starting out most of us discover that the biggest problem we have is finding clients to invest in a brand new manager with a brand new product. Unless your rich uncle Bob just retired and has got a few millions he does not mind investing with you, it may be an uphill battle to get that first seed money to get started. Before you start approaching potential clients you need to have a solid product to sell them, that is, your investment strategy along with your abilities to execute it, and be able to show them that you know what you are talking about. Designing an investment strategy is where this book comes in and I hope you will have a good platform to build upon once you reach the end.

There are two main paths for building a futures-trading business, as opposed to just trading your own money:

- *Managed accounts:* This is the traditional approach, where clients have accounts in their own names and give a power of attorney to the trader to be able to execute trades directly on their behalves. This is quite a simple approach in terms of setup and legal structures and it provides the client with a high level of flexibility and security. Each account is different, and so the client may have special wishes in terms of risk and such which the trader is usually able to accommodate.

  If this is not a desired feature and you wish to simplify trading, you can also get onto a managed-accounts platform for a bank or prime broker where you essentially trade one account and have trades automatically *pro rata* split on the individual client accounts. Since the money is in the client's own account, the individual has the added flexibility of being able to view the account status at any time or to pull the plug on the trading without any notices or otherwise intervene. The client does not need to worry about dealing with a possible new Madoff, because there are no middle men and the bank reports the account status directly to the client. For the money manager, the managed-account solution can mean a little more administrative work at times than if a hedge-fund type structure is employed.
- *Hedge fund:* With this approach, there is one big account for all clients. Well, in practice there may be several accounts at several banks, but the point is that all money from all clients is pooled together in one pile and traded together. This greatly simplifies the business side when it comes to handling client reporting and paperwork, but it requires a more complex legal structure, sometimes with a combination of onshore and offshore companies.

Regardless of which of these two main paths you decide to take, you need to do some proper homework on the pros and cons of either solution. More and more professional investors have a preference for managed accounts because they reduce legal risks, but for most managed-account setups you need larger amounts from each client than you would need for a hedge-fund setup. The situation also varies a lot depending on where you and your potential clients are domiciled. Look into the applicable legal situation and be sure to check what, if any, regulations apply. You may need licences from the local regulators and breaching such requirements could quickly end your trading reign.

DIFFERENCES BETWEEN RUNNING A TRADING BUSINESS AND PERSONAL TRADING

The most important difference in managing a private account and a hedge fund or other professional asset management is the importance of volatility. If your volatility is too high your investors are not likely to stay with you. A temporary drawdown of

50% for a small private account might be acceptable, depending on your risk appetite and expected rate of return, but it is not an easy sell to an external investor.

Marketability of your strategy

When you trade your own account, and sometimes even manage accounts for trusted people, you can trade on pretty much anything you think makes sense without having to convince anyone of how good your ideas are. If you are truly a very strong trader and you have a stellar track record, you may be able to do the same thing for a hedge fund or professional managed accounts, but the days of the black box funds are mostly in the past. Simply telling prospective clients to just trust you and only hinting at how your strategies work no longer makes for a good sales pitch. If you are dependent on raising assets for your new fund, as most of us are, you need a good story to be able to paint a clear picture of what your fund does and why it can make a big difference. This does not mean that you need to disclose all your mathematics and hand over source code for your programs, but the principal idea of what your strategy is about, what kind of market phenomenon you are trying to exploit and how you intend to do so, needs to be clear and explainable. You also need to be able to explain how your risk and return profile will look, what kind of return you are targeting and at what kind of volatility level. Even if you have a good story for these aspects, you still need to be able to explain why your product is unique and why the prospective client should not just go and buy another similar fund or hand money to a different futures manager with a successful track record of many years.

You need to work on presentation and marketing. If you have solid simulations for your strategies, use the charts and data in your material. Make professional-looking fact sheets that describe your philosophy and strategy, showing exactly why your product is so well positioned for this particular market and why your strategy is stronger than the established competitors.

Don't underestimate the difficulty and the amount of work needed to raise the initial seed money for your business. This can be a colossal task that can make or break your whole project. It often comes down to connections and friends in the market who can help you by putting up some initial cash and if you lack such connections you may find yourself having tough time. Even if you have a great strategy, a proven track record with individual accounts and a strong personal reputation in the markets, you are still very vulnerable in this phase and you may be forced to make deals against better judgment, such as paying a yearly fee for referred funds, in order to secure enough seed capital to make a fund launch possible.

Volatility profile

Volatility is the currency used to buy performance. If customers don't get what they pay for, they will leave very quickly. There simply is no loyalty in this business and that is probably a good thing in a strictly Darwinian sense. An old adage states that there is no such thing as a third bad year for a hedge fund; after the second bad year all the investors are gone and the fund is out of business.

In your strategy simulations as well as in your live trading, you need to pay attention not only to the overall return numbers but also to the drawdowns and volatility. Try to simulate realistically what your maximum drawdown would have been trading with the same strategy for the past 30 years, and then assume that something much worse will happen after your fund or trading product is launched. Drawdown is defined as your current loss from the highest historical reading of the fund or strategy. If you gain 20% in the first three months of the year, and then back down to +10% on the year in the next three months, you are in an 8.3% drawdown despite being up 10% year to date.

You need to be aware what magnitudes of drawdowns are normal for your strategy and how long it normally takes to recover, and of course what the longest recovery time was in the simulations. Even if your drawdown was not big, it is hard to retain clients if it takes years to reach a new peak. Remember that investors may come in at any time during the year, normally at the start of any month. Even if the investor who bought in at a lower price might be okay with a bit of a drawdown, the one who bought at the top may be a little grumpier.

Managed-accounts clients are generally stickier, as the industry term goes, than hedge-fund clients. This refers to the notion that the managed-account clients tend to stay longer with a manager and it takes more for them to close the relationship than for a hedge-fund client. This is largely due to the fact that the manager has much more personal interaction with a managed-account client than with a hedge-fund client, who is often completely anonymous to the manager. On the flipside, it is generally more difficult to find managed-accounts clients in the first place and they require more admin and relationship management.

A common concept in measuring risk-to-return profile is the Sharpe ratio. This ratio measures return above risk-free interest rate, divided by the standard deviation of the returns. For systematic strategies, anything above 0.5 is normally considered acceptable, and the higher the better of course. A fair case can be made against the use of Sharpe ratio for these kinds of strategies, however, because it penalises both upside and downside volatility where only one of them is negative to an investor. The Sharpe ratio is very well known, easily explainable to clients and comparable across funds and so it does have some merits, but a good complement to use is the Sortino ratio. This is a very similar concept but punishes volatility only on the downside, or below a required rate of return.

When analysing your strategies potential drawdowns and recovery times, you also need to consider the crasser factor of your own profitability. Although you should target to be able to at least break even on the management fee alone, all hedge-fund and futures account managers are, sometimes painfully, aware of the fact that the real money comes from performance fees. If you are in a drawdown for two years, you don't get paid any performance fees for two years and that could mean a very large difference in your own bottom line. After all, you are still running a business.

Subscriptions and redemptions

Client money inflow and outflow can create a headache for many money managers. You need to have a clear plan for how to handle this aspect and what to do when money comes in or goes out. This is a larger problem that it might sound and can have a significant effect on the return. When you get money coming in, do you simply add to all positions at the same ratio, increase selectively, open new positions for that money or leave it in cash? If you are still a fairly small fund and have a large diversified portfolio of futures, you might find yourself having three to four contracts of some futures and if you get subscriptions increasing your assets under management by 15% you just cannot increase your positions proportionally. The same naturally goes for an equivalent redemption.

If you get 15% new money coming in and you decide it's too little to increase position sizes, you effectively dilute the returns for everyone who has already invested. The correct thing to do is to adjust every single position *pro rata* according to the subscriptions and redemptions coming in, but for a smaller portfolio you will need manual intervention. If you only hold a few contracts of some assets, that is likely to mean that you already have a rounding error in your position size and you could use the subscriptions and redemptions to attempt to balance these rounding errors out. If you have new subscriptions, you could selectively increase the positions where you are slightly underweight due to previous rounding errors and vice versa. Unless you have a large enough capital base, some discretionary decisions will be needed in these cases.

One nice thing about futures strategies compared to other more cash-instrument-based strategies such as equity funds is that you will always have enough cash on the accounts to pay for normal redemptions. You probably don't need to liquidate anything to meet the payments for clients who want to exit or decrease their stake, as long as the amounts are not too large a part of the total capital base.

Psychological difference

When you review your simulation data and look at a 15% drawdown, it might not sound so bad but the first time you lose a million pounds, things will feel quite different. The added stress of watching the net asset value of your fund ticking in front of you in real-time will further assault your mental health. It takes a tremendous amount of discipline to sit tight and follow a predetermined path of action when a bad day comes along and you see a wildly ticking red number in front of you, losing tens of thousands by the second. Making rash decisions in this situation is rarely a good idea and you need to have a plan in advance for how to react to any given situation. If your simulation tells you that 5% down days are possible but far out on the tail, you cannot pull the plug on the strategy and step to the side if it suddenly occurs in front of your eyes, no matter how painful it might be.

This type of advice is easy to give but very hard to follow. It is obvious common sense but most people need to go through some really tough market periods and probably several times before this starts becoming less difficult. The temptation to override your strategy when it does badly will always be there and you need to have a rule in advance about whether you are allowed to override, and if so under what conditions and in what manner. Never make the decision on the stressful bad day, just follow your predetermined plan.

To attempt to maintain your sanity, it might help to try to distance yourself from the monetary numbers. Try not to view the fund's assets as real money but merely a way of keeping score in the game, like Monopoly money. If you start thinking about what the million you just lost could have bought in the real world, you lose your perspective and risk further losses or missing out on the rebound. Even worse, never calculate what the recent loss means in terms of your own management fee or performance fee and what you would have done with that money. After all, it's just Monopoly money.

An unwritten rule says that hedge-fund managers should have a large part of their net worth in their own fund. There are, however, two sides of that coin. The common argument is that having your own money in the fund ensures that your financial interests are aligned with your investors, so that if they lose you lose as well and vice versa. This is of course true, but on the other hand as manager you make most of your money on the performance fee of the fund and so the interest should already be aligned. There is then the added psychological stress of having your own money in the fund. It is certainly a lot harder to look at the fund as Monopoly money if you have a large part of your own money in it. Many investors will see that as a good thing, forgetting that if managers can distance themselves from the asset values and take a more rational perspective on the strategy, the performance might in fact be better. Emotions and investment decisions make a very bad mix.