SYSTEMS TRADING FOR SPREAD BETTING

An end-to-end guide for developing spread betting systems

Gary Ford

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Gary Ford

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Preface

What the book covers

My aim for this book is to provide a practical guide that will detail all of the steps I use when developing, testing and executing a trading system specifically for spread betting. The steps are based around a series of hands-on examples of turning a strategy into a trading system. The book contains the steps I have used and the avenues, benefits, pitfalls, tips and tricks that I have discovered during my development of systems trading strategies. The book is not a guide on how to trade, and does not dwell on styles of trading. It is purely a description of what I did, what I found to be successful and what I found did not work well. I appreciate that everyone has different trading styles, and hence I will try and approach the book with an unbiased view.

This book is also not about market behaviour, trader psychology, and details on how to spread bet, or a book of off-the-shelf strategies that you could use for spread betting. Throughout this book I have used a free strategy development system called NinjaTrader. Whilst many of the examples given show detailed steps on how to create them with NinjaTrader, this book should not be considered a user manual for NinjaTrader. To learn how to use NinjaTrader the reader should take a look at the www.ninjatrader.com website and take part in many of the fantastic free seminars that the NinjaTrader team organise each week.

Some of the strategies developed in this book have been successful and some have not been profitable. My intention behind this book is not to give you a strategy to go and trade, but to give you the knowledge and methodology to use the tools to develop many successful strategies of your own.

Malcolm Pryor's book, *The Financial Spread Betting Handbook*, covers the end-to-end process of spread betting in detail, and should be considered a great reference for those wishing to understand more about spread betting.

Who this is for

This book will be suited to the intermediate level spread bettor who currently has at least one trading strategy, and is looking to develop that strategy into a system strategy to reduce the amount of manual intervention needed. In addition, this book will help the intermediate spread bettor to enhance/prove the performance of their strategy by developing it into a trading system and backtesting it against historical data.

How the book is structured

The book is structured to follow the steps needed for the trader to progress from being an intermediate-level spread bettor through to having a developed, tested and working system trading strategy for spread betting.

Introduction

'The stock market is a dangerous place to be, be sure to stay away' was the advice given by my peers. And after years of investing in instruments such as government bonds, high interest savings accounts and cash ISAs I had turned a moderate pile of cash into a slightly larger pile of cash. No emotion. No research. Just straightforward, and rather dull, investing. Or to be more accurate, someone else investing my money for me. Whilst the returns were fairly moderate, they were acceptable to me.

I then progressed onto the next rung of the investing ladder by subscribing to a weekly finance magazine. Each week, several highly qualified investment gurus would list all of their top stock-picks for the weeks, months and years ahead. Obviously these gurus knew their stuff, so I blindly purchased their recommendations. Fortunately for me a steadily growing bull market carried my purchases along nicely – and still today, even with a few of the recent wobbles, my investment portfolio is happily earning dividends, but it is never going to earn me a living or allow me to achieve financial freedom.

After a few more years, and more hot-tip subscriptions, my buy and hold strategy became as boring as my initial reaction to government bonds. With broadband at home and a constant connection to all of the information on the Internet, I finally did some research into the black art of trading. Spread betting to be more accurate. After the initial excitement of trading a "player account" for a few months, I naturally progressed into opening a full account and funding it with real money! After attending several free seminars – surrounded by other gamblers and reading many books on trading, I had a good understanding about technical analysis, and why I needed to use it. As they say, a little knowledge is dangerous. After several months of good fun on the highly emotional trading rollercoaster my account was back to just above its initial starting point. Whilst I wanted to continue with my discretionary trading, both my day job and my lack of trading experience were getting in my way. Sensibly, I chose not to give up the day job, but to spend my spare time researching trading.

Many more years, books and courses followed. Many trades on both the player account and live account were logged and analysed, with simple trading strategies providing small but consistent returns. The emotional roller coaster still existed, but felt like it was under control. I still had the urge to give up the day job, until I discovered system trading. As I had spent the best part of 11 years in the IT industry, I was very familiar with the use of automation. System trading appeared to offer the holy grail of trading. I could code up my trading strategies and get them to notify me of buy and sell signals. All of the automation would run in the background without much, if any, input from me. The trades would be clear cut, based on tested strategies, with no emotion involved. I could do this and still keep the day job!

This book details my journey in the world of system trading for spread betting. It is important to understand that every trader has his or her own approach, and that it is very easy to trade someone else's profitable strategy and still make a loss because the strategy cannot be moulded to the trader. I believe that it is very important to develop and refine a strategy to match your lifestyle. Doing so will ensure that you do not deviate from the strategy. I have made many mistakes during this journey, and learnt a lot about myself in the process. I have also learnt many tricks and shortcuts which have made my trading easier to manage and more profitable. I hope to share them with you throughout the course of this book.

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Trading Systems

Discretionary Traders

A discretionary trader uses a combination of intuition, advice and technical or fundamental data to determine when to enter and exit a trade. Because this trading methodology employs no quantifiable game plan, the discretionary trader tries to predict the market, but no one knows for certain where the market is going, when it will move, or which market will be the next big mover. The discretionary trader does not always make the same interpretation of a market indicator, or use it in the same fashion every time. The trader uses his or her own judgement to predict the market move. I am not suggesting that the discretionary trader does not have a strategy, as all successful traders require a strategy to enable them to have an edge over the market. The use of personal judgement gives the discretionary trader the advantage of flexibility of whether to take the trade or not, but of course this judgement can fall foul of human emotion. Also, because of the manual effort involved in performing the analysis, much more time and effort must be exerted during trading. An advantage of discretionary trading is that the trader develops their intuition about the market or instruments they are trading.

Trading Strategies

Strategies are all about probability. When creating a strategy we aim to create one that has a higher probability of profit than loss. Trading success comes from high probabilities and not certainty. It is impossible to eliminate losses, so we aim to minimise them.

Put simply, a trading strategy is a predefined set of rules to be met before opening, managing and closing a trade. Strategies range from the straightforward crossing over of moving averages through to multiple indicator, multiple time frame analysis with pattern recognition and artificial intelligence.

The purpose of the strategy is to give the trader – or their computer – the pre-defined set of rules to follow each and every time a trade is to be placed or exited. Creating and following a strategy can give a trader the edge they need to be successful in the markets.

Trading Systems

A popular belief is that human emotion, specifically greed and fear, are some of the greatest barriers to becoming a successful trader. Most readers will be familiar with the phrase "cut your losses, and let your profits run". Just as many readers will have encountered a series of sequential losing trades and have stalled instead of placing the next trade, or held on to a losing trade instead of closing out the losing position, and instead end up watching the position go further and further away.

A **trading system** wraps trading formulas into an order and execution system. Advanced computer modeling techniques, combined with electronic access to world market data and information, enable traders using a trading system to have a unique market vantage point. Traders, investment firms and fund managers use a trading system to help make wiser investment decisions and help eliminate the emotional aspect of trading. A trading system can automate all or part of your investment portfolio. Computer trading models can be adjusted for either conservative or aggressive trading styles.

A trading system is governed by a set of rules that do not deviate based on anything other than market action. Emotional bias is eliminated because the systems operate within the parameters known by the trader. The parameters can be trusted based on historical analysis and real world market studies, so that the trader who is familiar with the trading system and its operating characteristics can have confidence in a pre-determined trading strategy.

The three elements that make up a trading system are:

1. The strategy formula itself. Benefiting from a successful testing phase, and expected to provide profitable returns.
2. A money management strategy. Often this is closely interwoven with the strategy formula, as poor money management of a winning formula can still empty an account.
3. Trader discipline. The systems trader needs to have the discipline to trade the signals generated by the strategy, unless the strategy is fully automated and the positions are controlled automatically.

Misconceptions Of Trading Systems

I recently attended a seminar in London about mechanical trading systems. Whilst talking about system performance analysis, the seminar presenter discussed that he would not trade a system that had less than an 80% success rate. This is a figure that I think would be hard to find in the majority of mechanical strategies.

Trading systems are not the holy grail of trading. A trading system is likely to have just as many losing trades as discretionary trading strategies.

My personal views on mechanical systems are as follows:

- They have been developed in such a way so as to be generalised enough to be profitable for a range of instruments.
- They are robust enough to withstand a variety of market conditions, or have rules in place to know when to stop trading if unfavourable conditions appear.
- They will compute in the background, taking trades that meet a certain criteria without the need for constant human analysis.

High Level System Descriptions

Aggressive

An aggressive system would be one that typically exhibits some or all of the following characteristics:

- Larger drawdowns. Perhaps through not having stop-loss levels set, or through having very wide stops.
- Holds open positions longer. Holding onto a losing position usually results in a larger drawdown. The system is hoping for a change in market direction to take the trade back into profit. Conversely, the system is also prepared to hold onto a winning position longer in the hope that further gains can be achieved.
- Higher number of open trades. These can be open positions of the same instrument at different prices and stakes, or multiple positions in different instruments.
- Sporadic equity curve. Likely due to taking on large position sizes.
- Curve fitted. The system has been over optimised and only appears to generate gains for a specific instrument and a particular market condition. These systems typically have a very short lifetime or fail from the outset.
- More frequent trades.
- Less restrictive entry criteria/filters.
- Higher percentage of capital risked per trade.

Cautious

A cautious trading system would typically exhibit some of the following characteristics:

- Low frequency of trades due to more restrictive trade entry criteria.
- Large emphasis on capital preservation, so a smaller amount of capital risked per trade.
- Wider range of instruments traded to provide an average return over multiple markets.

Moderate

A moderate trading system exhibits traits of both the aggressive and cautious trading systems, with perhaps an in-depth focus on market conditions to decide when to take on more risk.

Other Definitions Used Throughout This Book

Spread Betting Company is the commonly used term to identify the majority of companies that offer financial spread betting. In financial commerce the term **broker** is used to identify an intermediary who acts between a buyer and seller. Technically a pure spread betting company is more of a bookmaker than a broker as they take the other side of your trades. However, in order to make this book more readable, I shall use the terms broker and spread betting companies interchangeably throughout.

I have also used the term **instrument** to cover the whole range of equities, futures, currencies, indices, etc. that can be traded through spread betting. Throughout this book the trading focus is on currencies/foreign exchange, yet the term instrument rather than currency pair is still used because much of the content of this book is applicable to all things tradable. The term instrument also matches the term used in the strategy development software used throughout this book.

Other terms and definitions can be found in the glossary at the back of this book.

Reasons To Trade

Psychology is an important aspect of trading. Even with system trading, psychology still plays an active role. There exist many great books on trading psychology, and hence I will not be covering this topic in any depth. However I do feel that it is important to address why we are trading.

Why are we trading?

Everyone has a different reason to trade, some of the common reasons include:

- Income. Trading to live.
- Career change.

- Excitement. Living to trade.
- Boasting rights, or trying to impress.
- Boredom and looking for a challenge.
- Additional funds each month to supplement the day job.
- Creation of a portfolio of trading strategies to replicate a mini hedge fund.

Realistic goals

As with discretionary trading, system trading also relies on the trader having realistic expectations. Whilst I have regularly used strategies that have increased my account capital by 20% in a day, I have also seen those profits disappear on other days. If you aim to double your capital every few months, and you have a strategy to do this that you are happy with, then this is a realistic goal. However, personally my realistic goals involve having a series of low to medium risk strategies that generate a return that outperforms general investments such as cash, bonds or index trackers, coupled with the tax-free status of spread betting.

Different ways to use a trading system

There exist many ways to trade a trading system, but the three most popular ways include:

- Follow all of the buy and sell signals religiously. This involves great discipline and faith that the trading system is profitable. Following this method should ensure that the performance results resemble the results seen during testing.
- Use the systems signals as guidance. In Jack Schwager's book, *New Market Wizards*, many of the successful traders mention that they use trading systems to generate buy and sell signals, and then apply their own market knowledge to the signal to decide whether to proceed with the trade.
- Use the system to open the trade, but use discretionary principles to manage and exit the trade.

Conclusion

We can conclude from this introductory chapter that by using trading systems for spread betting we can achieve many things, including:

- Allowing a computer application to generate trading signals based on our current strategies, thus removing some of the repetitive effort from our trading and leaving the trader with more time to spend on further analysis, system development, or just time to relax.
- By developing our strategies into trading systems we can backtest them against a range of time frames, instruments and historic data to see how our strategies would have performed under various market conditions.

Throughout the remainder of this book we will analyse, develop, backtest and optimise several example trading systems.