



Wiley Trading

TRADING REGIME ANALYSIS

The
Probability
of Volatility

MURRAY GUNN

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Murray Gunn



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Foreword

I have always been very suspicious of people who write books on financial market trading or investing. The plethora of books, such as “how to trade this way” or “how to make a million dollars from the market”, has always had me asking the same question. If the analysis, system or method that these authors present to the world are so good and consistent in extracting value (i.e. money) from the financial markets, then why oh why are they not sitting on a beach somewhere watching the profits roll in rather than writing books about it. It’s a well-known fact that a lot of authors on investment or trading in the financial and commodity markets make their living from writing about how to do it, rather than doing it themselves. Many of these authors in fact have never traded the markets but instead do a great job in marketing themselves as gurus and even brands that people who do actually trade the markets follow, sometimes on what seems like a religious basis. The old phrase is that “those that *can*, **do**, and those that *cannot*, **teach**” and the cynics among us would point out that this is true in just about any field or profession. The problem with books being written about trading in the financial markets is that the people who would be interested in them tend to analyse things in a black and white fashion given the nature of their endeavour. People who are interested in trading the markets for profit know through experience that it is one of the most difficult endeavours that human beings can subject themselves to and so once they have been doing it for a while they tend to view books on “how to trade the markets” with a very healthy dose of salt. Experienced practitioners know that there is no one method or system that is the answer to the markets puzzle and that only diligent hard work and analysis is what will pay off over the long term.

So what is different about his book? Well, the first, and most important, thing to point out to the reader is that the royalties from the sale of this book are being paid directly to a charity, so it should be crystal clear that this book has not been written for any personal monetary gain. This may seem strange to some but, as someone who

is passionate about market analysis, writing a book about it is a labour of love rather than of profit.

Secondly, this book is not intended to be a “how to trade the markets” type of book. If I had all the answers to the questions that the markets pose, or if I had a method or system that added value in every single time period, I would certainly not be writing a book about it! I would be sitting in the sunshine by the pool, at that villa by the golf course where I would play every day without having to worry about where my daughter’s education fund was going to come from! Ah yes, we can but dream. If someone has a method or arbitrage system that is *so* good, why would he want to share it with anyone else in the first place since doing so may well dilute its potency? No, this book is not a “how to” book in the genre of making you a guaranteed millionaire, so if that is what the reader is expecting then I suggest he puts it down now. This book is the amalgamation of my thoughts and experiences gained over the last 20 years in market trading and analysis. It is intended to be a contribution to the body of knowledge in market analysis, in particular technical market analysis that the International Federation of Technical Analysts (IFTA) is doing so much to categorise and nurture. Trading ideas and methods *are* presented in the book but they come with a very big health warning because I know from my own experience of investing in and trading the markets that no method is infallible. What we deal with in market analysis is probabilities rather than certainties. There are no certainties in the markets. Ever. This is a realisation that can really only come through market experience and having been knocked down countless times just when you think you have got the markets figured out. Probability can be measured in many different ways and it can mean different things to different people but, essentially, it is defined as the chance of something happening. In the markets that chance is generally 50% but there are times when the odds improve somewhat to skew it above the classic chance of heads or tails in a long game of coin toss. This calculation of chance has to be based on an analysis of the past history because there is, in the end, nothing else on which to base it. Whether you decide to use economic data, corporate statistics, market price action or anything else, the one common thread in market analysis is that we are all trying to find things that had a relationship with how the markets subsequently behaved in the past and, therefore, in all probability, will have that same relationship in the future.

The other important point to note is that this is not a book about quantitative analysis, and if you are a “quant” who is expecting this book to be filled with equations and abstract terms please do yourself a favour and put the book down. The title of this book refers to trading regime analysis, but I must point out from the outset that *my* concept of trading regime is, if not too different from, certainly much simpler than, the concept of regime that our quantitative and econometric friends think of, which include references to Markowitz mean variance, Markov chains, vectors, modes, state space or any other such terms that anyone without a PhD in physics would struggle to understand! I have in fact included a passing reference to what I would describe as the more quantitative analysis of trading regime, but I

must emphasise that the regime or modes that Hamilton and others refer to in the quantitative or econometric field are different from my definition of trading regime. Most relevantly, I limit my definition of trading regime to essentially two so-called states whereas a lot of the traditional quantitative references to regime switching take multiple (macro-economic) regimes into account.

In many respects this book is intended to be an antidote to the complication and extreme mathematical models that purvey the field of investment management these days. This is not to say that there is not a place for such modelling but, having read the social science of economics by training and being a market price analyst in practice, I look at the markets more from the perspective of an artist rather than an engineer. To me, the financial and commodity markets are a never-ending experiment in *social psychology* rather than an experiment in a physics laboratory. This book, therefore, is much more market philosophy than market science.

Acknowledgements

I could not have written this book if it were not for the help and support of many people, some of whom are probably not aware that they have helped me to compile my thoughts in such a way.

I would like to thank my colleagues and professional contacts with whom I have engaged in stimulating discussions about market theory and analysis throughout the years I have been working in the financial markets. Many of these people, although holding very different viewpoints from my own, hold the same passion about the markets that I have, and so debating over market philosophy has been (and still is) a great joy. In particular, my thanks go to Kurt Magnus (the Steve Irwin of the FX market), David O'Loan (for putting the idea in my head), Tony Plummer, Ian Williams, Mark Johns, Jeremy Fand, Gerry Celaya, Tim McCullough and Ryan Shea. There are countless others whose opinions about market philosophy I value and they know who they are.

Peter Eggleston and Theodore Chen from the Royal Bank of Scotland were vital in helping me with Chapter 16 and I would like to thank them for that, as well as providing some magnificent research on the subject matter in general. Monica Greer pointed me in the right direction for further background reading on psychology which was very useful. I would like to thank Mansoor Mohi-Uddin from UBS who is, in my opinion, one of the more original and insightful analysts in the markets. The UK Society of Technical Analysts has been a constant source of inspiration for me and I would like to acknowledge the fine work of the committee under the chairmanship of Adam Sorab in recent years. The global family, which is the International Federation of Technical Analysts, is filled with exceptional people who are passionate about market analysis and I salute them all here.

I have been heavily influenced in my own market thinking by the work and writings of Robert Prechter, Ed Seykota, Adam Smith, George Soros, Ludwig von Mises, Jesse Livermore and John Henry. They are constant companions in my study.

I have been fortunate in having a close family who have encouraged me throughout the years and I would especially like to thank my mother for instilling a proactive and positive attitude in me.

Lastly, I would like to thank my wife Nicola. Were it not for her consistent encouragement and support I would not have started this project in the first place and, for that, I am deeply grateful. Writing a book is a very time-consuming endeavour and, when family time is all that really matters in this world, having a spouse who understands and encourages is most appreciated. Nicola helped directly with the compilation of the book and did everything she could to make it easy for me to spend the necessary hours. She is my soul mate, and my love for her is in a perennial bull market.

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Part I

Supply and Demand

1

There is NO Holy Grail

"Everything works and nothing works."

Richard Russell

A MARKET JOURNEY

I started my career in the financial markets the way most people do. I went to university, earned an honours degree in economics and entered my first full-time job at the age of 22 believing that the markets obeyed the laws of macro- and micro-economics I had just spent the last four years studying. How wrong I was!

I have subsequently come to realise, as I think many people do, that the financial markets do not actually behave according to the textbook laws of economics and capital market theory. In fact, my own personal belief now is that the markets can (and will!) do anything at any point of time and "prediction", as we commonly think of it, is a totally impossible and futile exercise. However, I do not look back and think that my years studying messrs Fischer, Begg, Dornbusch, the theory of comparative advantage, the theory of purchasing power parity, the capital asset pricing model and a host of other "laws" was a complete waste of time. Not at all and I will tell you why.

There are two broad schools of thought for analysing the financial markets. One is the fundamental market analysis approach that makes use of "fundamental" data such as macro-economic statistics, corporate balance sheets and corporate profitability in order to predict the future course of prices in the markets. These statistics, backed up by perceptions and guesses about what they will be like in the future, are the so-called fundamentals of financial and commodity markets. The other approach is the technical market analysis approach that makes use of past market price data and sentiment indicators in order to anticipate the future course of prices in the markets. Proponents of the technical approach shun the fundamentals, as being irrelevant to an analysis of the actual supply and demand of the market itself that they say will be apparent in the market price alone. The technical school also differs markedly from

the fundamental school because the technical school has a much more pragmatic approach to “forecasting” future market prices than the fundamental school, which is something we will look at in detail later.

These are the two broad schools of market analysis and market participants generally fall into one group or the other for their preferred method of analysing the markets with some market participants using only one form of analysis and some using both simultaneously. However, no matter what your chosen school of analysis is, in my opinion it should be every market participant’s goal (indeed obligation) to study the methods and theories involved in each school of thought in order to gain a complete and as full an understanding of market theory as possible. I find it incredible that, even now, technical market analysis is not as widely taught in universities or finance courses as, in my opinion, it should be. The behavioural finance aspects of markets are thankfully becoming much more popular in courses though and, when you consider that behavioural finance is merely another term for technical market analysis (because technical analysis is an analysis of market psychology), then at least there is an element of balance appearing in modern finance teachings. Would we expect a lawyer specialising in criminal law only to have studied criminal law and nothing else? Would we expect a doctor specialising in cardiology only to have studied heart-related medicine? Of course not. We expect other professionals to have studied and have a broad understanding of their subject in order that we, as customers of their service, can have confidence in their knowledge and experience. Why does it seem different in the investment field? Both fundamental and technical analyses have recognised industry-accepted qualifications, but still only the minority of people in the investment industry will have badges from both schools. In this regard, therefore, my early market years submerged in the fundamental market approach have proven to be very useful indeed as I believe it has allowed me, as a keen student of the markets, to gain a much deeper insight into what makes markets tick and how the fundamental school interacts with the technical school.

In fact, as the years have gone past and my market experience and analysis has developed I have come to realise something that I believe many market participants do not fully appreciate. Most technical market analysts or investors started out as fundamental market analysts or investors before, having become disillusioned with the fundamental school, steering themselves in the direction of the technical approach. However, most fundamental market analysts started life as fundamental market analysts and dismiss the technical approach without ever having studied any of the theories at all! This, I think, is extremely instructive and is one reason why market price action behaves and cycles the way it does. More of that later.

So having completed my economics degree I went to work for a stockbroker where I gained my first market experiences of managing stock portfolios by analysing company accounts, profit and loss statements, attending corporate meetings and taking account of news flow. Younger readers may be shocked that our desk of three people had to share a quote screen for the stock prices we monitored! That was 1991! How times have changed. While working there I actually believed that reading the

financial press, diligently studying the company accounts, talking to the people in the company and following the news flow from the company would help me to predict the future course of the company share price.

And this is when it hit me. Why, when all the news was positive, the company was making money and the balance sheet was in healthy shape, would the share price go down? Why, when all the news was negative, the company was losing money and the balance sheet was a joke, would the share price go up? This was not how the markets were supposed to work for goodness sake. The textbooks all told me that if a , b or c happened then logically x , y or z should happen to the share price, but the only problem, it seemed, was that no one had decided to inform the markets that this was the case! I was intrigued and determined to find out as much as I could about the reason for this beguiling market behaviour.

As luck would have it my next job, in London, was managing bond and currency portfolios with Hambros Bank – one of the last of the venerable blue-blooded British merchant banks in the City – and it was here that I worked closely with a true giant in the technical analysis field, Tony Plummer. It was an honour to work with someone who took a much more rigorous intellectual approach to technical analysis than the majority of his peers and his classical work on price cycles became a major influence on my market analysis. I joined the UK Society of Technical Analysts, learned all I could about the subject and passed the diploma in technical market analysis. Now, one of the most undermentioned aspects of technical analysis is just how broad a subject it is. Essentially, technical analysis is concerned with using past price data in order to anticipate (anticipate rather than predict!) future price action but this encompasses a massive range of methods and theories. Dow Theory, Japanese Candlesticks, Elliott Wave Theory, Cycles, Gann Analysis, Behavioural Finance, Point and Figure, pattern recognition, trend lines, Chaos Theory, quantitative analysis, the hundreds and hundreds of price derivative indicators and Trend Following are only a part of the subject that is known as technical analysis. Add in sentiment indicators such as survey and positioning data and you have something that is massively broad in scope. Yet many people still think of technical market analysis as quite a narrow field. It is not. The term *technical market analysis* refers to anything that involves a study of the market price action as well as other related indicators, such as volume, to gauge the sentiment and psychology of the overall market in order to take advantage of trends and discernible patterns in price that the psychology cycle emits. The subject is extremely broad and the theories that underpin it pre-date modern theories such as the Capital Asset Pricing Model (CAPM) by centuries. As I wanted to incorporate such theories into my overall investment approach, I worked with technical analysis throughout my time in London while at the same time paying attention to the so-called fundamentals of the market.

By this stage in my career I had armed myself with a very broad understanding of all aspects of market analysis from the fundamental approach to the technical approach. I had seen throughout my career that some forms of analysis worked well at certain times but then didn't work very well in the next period, and those that

gave very bad results would all of a sudden come into their own and produce stellar performance. It was for this reason that I still struggled with the age-old question, the grand daddy of market analysis, the big kahuna of them all, that anyone who has had any interest in trading or investing in the markets has asked themselves at some point of their lives.

That question very simply is . . . *what works?* What method of analysing the markets works all, if not most of the time? What is the Holy Grail of market analysis and trading or investing? If we are honest with ourselves, anyone who has a passion for the markets would admit that this question has vexed us all in our quest for reliable and consistent profitable trading or investing and I am sure it will continue to do so because it is, at the end of the day, human nature to look for the consummate answer to puzzles and things that we, as human beings, seem powerless to control. And the markets are by far and away one of the biggest puzzles known to man. The question will also keep the steady supply of books, courses and what not with titles like *Trading Secrets* and *How to Make a Million Dollars in the Markets* coming in and being snapped up by people searching for that elusive Holy Grail.

After my stint in bond and currency market asset management I went on to concentrate full time on currency markets specifically. The currency or FX (foreign exchange) markets are sometimes referred to as the “most efficient” markets. This is confusing for the layman because the word “efficient” here is being used to describe the ease of dealing or the liquidity of the markets in terms of the bid (selling price) and offer (buying price) spread. At nearly three trillion US dollars turnover *per day* there is certainly enough liquidity to dwarf all other markets in that respect, but in terms of “efficiency” in the academic sense the currency markets are maybe the least efficient markets.

The efficient market hypothesis, the academic idea that information is absorbed into the price almost immediately and that, as a consequence, fundamental and technical analysis is useless, has been rightly condemned by practitioners in the markets. What the efficient market hypothesis is essentially saying is that prices move randomly, and therefore there should be no trends in the markets, but one only has to glance at a chart of a financial market to see that this notion is complete nonsense. Markets *do trend* up and down. Admittedly they do not trend up and down all the time and they sometimes trend sideways! This, in fact, is what this particular book is about.

Now, one of the assumptions that the efficient market hypothesis makes in coming to the conclusion that information is almost instantly digested into the price is that the market participants are all what is known as profit maximisers. That is, the market participants’ motivation for trading or investing in the market is to secure a profit. This assumption might well be true for markets like stocks and bonds, but when we examine the diverse range of participants involved in the foreign exchange markets then the assumption breaks down. The foreign exchange markets are made up of some profit maximisers like bank traders and currency investment managers but the market also has, among others, governments whose role in the market can be

to attempt to smooth out fast moves, industrial and commercial corporations whose actions in the market can involve buying and selling for import and export purposes and tourist companies whose actions are the result of retail tourism decisions. So with not everyone in the foreign exchange markets being profit maximisers, the informational importance contained within the efficient market hypothesis gets diluted a great deal and the market transactions, at any one time, can be the result of a multitude of very different decision criteria. Therefore, the FX markets are actually one of the least efficient markets in the academic sense and this partly explains why the foreign exchange markets can show a greater deal of persistence (or trend) than other markets as information seeps into the foreign exchange markets, or more accurately is acted upon in the market, contrary to the popular image of the FX markets being lightning speed and dynamic, at a much slower speed than the efficient market hypothesis would suggest.

Realising this, however, did not help me in my career-long search for the illusive Holy Grail of trading. "Foreign exchange markets trend more than other markets." Great, I thought. So employ a trend-following method and watch those profits roll in. Hhhmm... not quite! Yet again I found that there is not one method of trading or investing in the markets that is consistently profitable in every time period. Sometimes the best results came from following the trend, sometimes the best results came from fading the trend, and sometimes the best results came from doing absolutely nothing at all!

Therefore, from where I sit today, having managed institutional money in stocks, bonds and currency markets (and my own private money in commodity markets) I feel that I have a pretty good understanding of what makes most markets tick. After years of painstaking research, academic testing and a huge amount of real world trading of methods and theories trying to work out the best way to trade and invest in the markets, I have come to this not so startling conclusion. *Everything works... some of the time.*

This is what this book is about. It is about a pragmatic approach to trading and investing rather than a "trading method that will make you rich" type book. This book is not about a "guaranteed" way to make money and is certainly not about some sort of "magic" system that will make you a millionaire. If that is what you are looking for, I suggest that you stop reading now. Incidentally, there is actually a book called *The Trading Rule That will Make You Rich* by Edward Dobson and I thoroughly recommend it because it has some very valuable insights about market behaviour. However, as will become clear to the reader, I would not recommend trading all your capital on just one methodology.

The realisation that "everything works but only some of the time" is, in my opinion, crucial to long-term success or survival in the financial trading market place. Over the course of my career in the financial markets I have found out that there is actually no holy grail for trading success and there is no magic method that will guarantee you to trade or invest consistently profitably. Instead, what I have found is that by analysing the probabilities of what *trading environment* or "*regime*" the