

Understanding Gaps



Scott Andrews
"The Gap Guy"

Understanding Gaps

Profiting from the opening gap

Scott Andrews

“The Gap Guy”

Copyright© 2008 by Master the Gap, Inc. All rights reserved.

Printed in the United States of America. No part of this publication may be reproduced or transmitted, in any form or by any means; electronic, mechanical, photocopy, recording or otherwise, without the prior written permission of publisher.

ISBN 10: 1-934674-01-X

ISBN 13: 978-1-934674-01-7

Edited by Edward Dobson

Disclaimer

Trading and investing has large potential rewards and large potential risks. You must be aware and fully understand these risks and be willing to accept them in order to invest in equity, futures, options, currencies and other financial markets. Do not trade with money that you cannot afford to lose. This material is intended for educational purposes only and is believed to be accurate, but neither the author nor publisher makes any warranties regarding its accuracy. This material is neither a solicitation nor an offer to buy or sell equities, futures, options, or currencies. No representation is being made that any account will or is likely to achieve profits or losses similar to those discussed in this book. The past performance of any trading system or methodology is not necessarily indicative of future results. The author asks that you use this information at your own risk!



Published by Traders Press, Inc.®

PO Box 6206

Greenville, SC 29606

www.traderspress.com

Contact us:

(800) 927-8222

customerservice@traderspress.com

Purpose of This Book

Whether you are interested in adding the opening gap to your daily trading plan or just improving the timing of your entries in swing trades and long term investments, this guide can help. By the end, you should have a basic understanding of gaps, a structure for creating a profitable strategy, some helpful probabilities and tips, and a little inspiration to help you get started.

Publisher's Foreword Understanding Gaps



Understanding Gaps is part of an ongoing series of publications of Traders Press Inc®. Each book in this series is intended to provide traders with an “up-close” look at a topic which has had little in depth coverage in other trading related literature...and to provide a source of additional information as well as a listing of other sources and articles from which the reader may learn more about the topic covered.

The idea for this latest addition to our “*Understanding...*” series was born when I had the pleasure of meeting Scott Andrews at the New York Traders Expo in February 2008. It became readily apparent from our conversation there that he had spent a great deal of time and effort studying opening gaps, a topic about which I had seen little written and which I felt would of great interest and value to fellow traders. In my opinion, Scott, “The Gap Guy”, is one of the world’s foremost experts on gaps and how they might be profitably traded.

It is our hope that his research and comments on gaps will help you to advance your skills and knowledge as a trader, and will prove a valuable resource to your trading library.

A handwritten signature in black ink that reads "Edward Dobson". The signature is written in a cursive, flowing style.

Edward Dobson, President
Traders Press, Inc.
Greenville SC

May 21, 2008

Table of Contents

INTRODUCTION	1
Why I Love Trading Gaps	2
WHAT ARE GAPS?	4
The Basics	4
How To Use & Profit from Gaps	10
The Promise of Gaps	11
The Paradox	11
CREATING A PROFITABLE STRATEGY	13
Gap Size	13
Gap Zone	14
Seasonality	15
Stop Size	16
Target Optimization	18
REAL WORLD EXAMPLES	20
How I Trade Gaps	20
Gap Fade Examples	22
“Go With” Example	35
“Fade the Fill” Example	37
GAP TRADING TIPS	39
GET STARTED!	41
Conclusion	44
GLOSSARY	46
BIBLIOGRAPHY	49

Introduction

Trading for a living is a lot like flying a helicopter in combat. The stakes are high and the risks are everywhere. The enemy can shoot you down, the aircraft can malfunction, or you can simply make a mistake and crash and burn on your own. I learned how to fly at the U.S. Army Aviation Warfighting Center at Fort Rucker, Alabama and I'll never forget the words of my first instructor, a crusty ol' Vietnam veteran with a big southern drawl, "I'll teach everything you need to know to fly that helicopter, but whether you survive or not, is totally up to you." Believe me; he was not talking about whether I'd graduate from the program. Up to that point, it had never crossed my mind that the world's greatest instruction was no guarantee for my survival.

When I committed to becoming a full time trader, the parallels between learning how to fly and learning how to trade were quite obvious. The keys to success were threefold: 1) master the fundamentals, 2) start slow, and 3) above all else, SURVIVE the learning curve. So, I enrolled in a rigorous, monthly training program with a credible trading and options mentor. My goal was to learn everything I needed to know in order to generate enough profits per month using my cash assets so that I could make a living as a trader.

Though I followed his system and rules precisely, I struggled with consistency. Because his approach was completely indicator-based and heavily reliant upon options, it was impossible to back-test and, therefore, I never knew if any given loss was due to my execution (i.e. interpretation of the charts) or was simply an unavoidable loser. (Using the flying analogy, it was sort of like having an accident and not knowing whether the cause was "pilot error" or an engine malfunction.) Further, having significant sums of capital at risk in volatile stocks for weeks or more at a time was driving me crazy. Just like a helicopter pilot flying an airplane for the first time, I kept "over-controlling" by tinkering with my trades (i.e. cutting

the winners short) in an attempt to reduce risk and lock in profits. This, of course, resulted in the classic beginning trader's diet: "eat like a mouse and defecate like an elephant."

After two years, it was clear: this proven but highly subjective methodology was a terrible fit for "me." I knew how to "fly", but I needed to find an "aircraft" better suited for my personality. So, I went looking for a style and approach that would work for my strengths (structured and mathematically inclined), my weaknesses (impatient and limited trading experience), and desired lifestyle (flexibility during the day without having to watch screens all day – I didn't want another "job.") Ultimately, this led me to the world of gap trading, and specifically, the opening gap of the S&P 500® futures.

Why I Love Trading Gaps

Trading gaps is not for everyone. But for me, I consider the opening gap, the ideal trade setup. They occur almost daily, offer plenty of profit opportunity, and are normally short term in nature (1-2 hours). Gap trading offers many other compelling benefits including:

- 1) Gaps have an inherent bias and edge: over 72% of all gaps in the S&P 500 futures market have filled the same day over the past ten years.
- 2) They occur frequently (three to four tradable gaps per week in the S&P) so I am not reliant upon catching that "one big winner" to achieve my monthly goals.
- 3) It's an easy trade to learn and play. No need to "time" the entry - just use a market order at the open.
- 4) I can prepare in about 15 minutes before the market opens each day. No need to scan hundreds of stocks at night.
- 5) I can trade them without charts and from anywhere.

- 6) Getting filled with minimal slippage is not an issue – especially in highly liquid markets like the equity indices and futures markets (S&P 500, NASDAQ 100, etc.).
- 7) The target is pre-defined so I don't have to manage the trade after placing it (though sometimes I do to maximize profits).
- 8) My risks are controlled and limited to a small percent of my account. No overnight risk.
- 9) Gap trades work in bull and bear markets equally well. I don't need to predict the market's next move.
- 10) They occur in most asset classes (equities, futures, currencies, etc.) and can be traded using stock, options, and futures contracts.
- 11) I can grow my account several percent per month on average, and often more with this single, simple setup using just one market. No need to baby-sit lots of different markets waiting for that perfect, entry-sensitive trade to appear.
- 12) Understanding the bias of the market before and after the gap fills, provides a trading edge for the rest of the day while also helping optimize my entries on swing and position trades.

I am not the only one who recognizes these many benefits. James Altucher, in the first chapter of his book, Trade Like a Hedge Fund, states:

“The gap trade is the bread and butter trade for many day traders and hedge funds.”

The opening gap in the S&P futures is the single most significant daily event in the global equity markets. It is, therefore, arguably the most important trade of the day. Because I trade the E-Mini S&P 500® futures for a living, most of my examples and research are based upon this index. However, the fundamentals of gap trading shared in this book can be applied to gaps in any market.

What Are Gaps?

The Basics

The most common definition of a “gap” is the difference between an asset or instrument’s opening price and its prior day closing price. This difference shows up visually on a technical price chart as an open space or “gap.” Many markets now trade nearly 24 hours a day electronically; however, the bulk of volume is transacted during their “regular” trading hours (i.e. open outcry or pit session hours, e.g. 9:30–16:15 ET for the S&P 500). For this reason, the regular session’s open and closing prices carry great significance for most traders and their systems. (Note: some traders define a gap as the difference between the prior day high or low and the next day’s opening price. However, the research and examples presented in this text are based on the difference between the open and the prior day close.)

Gaps occur for a variety of reasons, including geopolitical activities, earnings announcements, economic reports and related events that transpire during non-regular trading hours. These events often trigger significant price movement away from the prior day closing price, resulting in an imbalance of supply and demand the next morning. The regular session opening price represents a critical time for all market participants since they have to decide whether to accept or reject this new price. The majority of the time prices will retrace some or all of the overnight price action during the following day’s trading session. If the price retraces all the way to the prior day closing price, the gap is considered to have “filled” or “closed.”

Many traders seek to profit from the tendency of prices to retrace the overnight movement by trading in opposite direction of the open. This is commonly known as “fading the gap.” Figure 1 shows an example of an opening gap in the E-Mini S&P 500 futures. The “prior close” is the last trade as of 4:15 p.m. ET of the previous day’s regular trading session. The “opening price” is the first trade at the market open at 9:30 a.m. ET. Note how prices on the five minute chart climb steadily

shortly after the open, retracing back to the prior day's close, before reversing sharply and trading lower for the remainder of the session.



Figure 1. Example of Opening Gap that “Fills” (i.e. retraces overnight move)

Since gaps are the result of human behavior reacting to a variety of market forces, the subsequent price behavior often develops into a pattern that is repeated again and again. The four most common gap patterns are:



Figure 2: Breakaway Gap, 2-27-07.

Breakaway Gaps. These gaps occur after a period of price consolidation. They are caused by a surge of demand to buy or sell the market, typically in response to a significant event. The gaps are not filled during the same trading day (often not for many days or weeks) and are associated with above average volume. See Figure 2.



Figure 3. Common Gap, 3-7-08.

Common Gaps. These gaps occur throughout a market's typical ebb and flow in response to a wide variety of events and news. They are often associated with average or below average volume and generally fill the same day. See Figure 3.



Figure 4. Continuation Gap, 4-18-01.

Continuation / Runaway Gaps. These gaps occur during, and in the direction of, an ongoing trend and are generally viewed as confirmation of a trend's strength. They are associated with above average volume and often do not fill the same day. See Figure 4.



Figure 5. Exhaustion Gap, 1-22-08.

Exhaustion Gaps. These gaps occur at or very near the end of a trend. They are typically associated with very high volume as the very last buyers (or sellers if the asset is in a downtrend) jump aboard a trend that is ending and are overrun by opposing market forces as prices stall and often reverse sharply that day. See Figure 5.

The challenge, of course, is being able to recognize the type of gap early enough in the trading day so that you can trade it appropriately and profitably. Many traders use volume to help identify the type of gap, but this can be tricky since large volume may not appear until late in the session.

How to Use & Profit from Gaps

Traders and investors pay attention to gaps for different reasons. Many traders “fade” (i.e. trade in the opposite direction) Common and Exhaustion Gaps by buying “down” gaps or selling (i.e. shorting) “up” gaps and targeting the prior day’s closing price. Their objective is to profit from the historical tendency of gaps to retrace the overnight move and to close out at the end of the day if the gap has not filled. Swing traders look to do the same, but in conjunction with other analysis that lends them to believe that the gap is an Exhaustion Gap and the reversal may be the beginning of a multi-day or multi-week move. Swing traders will also use Breakaway and Continuation Gaps as opportunities to enter trends in the direction of the gap.

Generally speaking, day traders will enter a gap fade immediately at the market open or sometime shortly after the open. Swing traders will do the same if they believe the gap could be an Exhaustion Gap and they want to get positioned for a potential move in the opposite direction. They will enter a Common Gap after prices retrace and fill the gap, or after it is clear that it is a Continuation or Breakaway Gap that will not fill that day and a multi-day trend is likely beginning. This text won’t cover the myriad of entry techniques used by day and swing traders; however the bibliography at the end includes an excellent source of articles and books that delve into a wide range of common and not so-common techniques.

While gaps occur in most markets, many traders prefer to play them using a broad index such as the Standard & Poor’s 500® (S&P 500) or Dow Jones Industrial Index® instead of an individual equity or commodity. The reason is simple: a diversified basket of securities may be less likely to “gap and run” since it is less prone, in theory, to a single specific news item causing a sustained move.

Investors can benefit from paying attention to gaps too. Dr. Harry Schiller, a columnist for the TheStreet.com, may have said it best in video-taped interview at the June, 2007 Moneyshow (paraphrased):

‘Gaps define the markets’ action, especially the S&P futures gap, on an intraday, daily, even monthly basis... very, very often. Whatever you are buying, you will do a better job, be more effective and more profitable, if you buy as those gaps are getting filled. People who don’t pay attention to gaps, are just missing the boat!’

The Promise of Gaps

Gaps are important to traders of all types and time-frames because of their frequent occurrence and strong, proven tendencies to fill the same day. The S&P 500 index is a good benchmark because it represents a wide range of equities and sectors. The table in Figure 6 shows the results of hypothetically fading more than 2,000 opening gaps (≥ 1 point), using no stop, in the E-Mini S&P 500 futures from January 1, 1998 through April 30, 2008. Note: “Win %” is defined as the percent that hit the gap fill target (i.e. prior day close) or finished the day profitably.

Year	Number of Gaps	Win %
2008*	79*	72.2%
2007	225	64.9%
2006	200	72.5%
2005	196	71.4%
2004	213	72.3%
2003	211	75.4%
2002	229	73.4%
2001	208	74.0%
2000	223	73.5%
1999	236	75.9%
1998	226	73.0%
Total:	2167	72.6%
		(average)
* January 1 - April 30, 2008		

Figure 6. Gap Fade Win Rate (using no stop), 1998-2008.

The Paradox

With such a proven bias to fill the gap, it would seem logical for traders to just fade them all since roughly three out of four should be winners, right? Not quite. Figure 7 shows that using no stop, targeting the gap fill and closing out at the end of the day if the gap has not filled, resulted in marginal “profit factors” (i.e. total gross profits/total gross losses).

Year	Profit Factor
2008*	1.24
2007	0.71
2006	1.01
2005	1.05
2004	1.11
2003	1.30
2002	1.14
2001	1.16
2000	0.94
1999	1.14
1998	1.06
Average:	1.08
* January 1 - April 30, 2008	
Profit factor = total gross profits / total gross losses	

Figure 7. Gap Fade Profitability (using no stop), 1998-2008.

Clearly, this is not a very profitable strategy since the gross profits were barely greater than the gross losses. The paradox lies in the fact that a stop loss must be used in order to protect profits from the 25-30% of gaps that do not fill, and that often move aggressively in the direction of the gap and opposite of your “fade.” You may trade a series of smaller gaps that fill successfully, only to watch that one large gap continue running away, taking your account and profits right along with it.

Thus, trading gaps poses a difficult dilemma: *what size stop loss should be used?* If the stop is too tight (i.e. small) then the trader risks being stopped prior to the gap filling. If the stop is too large, then the trader’s losses will erase some or all of the profits from the winners.

There is no simple answer, but a multi-dimensional approach that integrates gap selection, reasonable stops, and optimized targets can create a very profitable gap trading strategy for any market. We’ll start to put these pieces together in the next chapter.

Creating a Profitable Strategy

Whether you are day trader seeking to profit from fading an opening gap or a swing trader looking to optimize your position entry, the first key for success is being able to identify those gaps that are most likely to fill (i.e. common or exhaustion gap vs. continuation or breakaway gap). Gap size, gap zone, and seasonality are three elements of gaps that provide helpful clues for choosing winning setups and building a successful trading strategy.

The examples that follow are all based on the S&P 500 Index futures market. However, traders may apply this framework and analysis to any market to develop a gap trading strategy.

Gap Size

Perhaps the most common method for analyzing gaps and their probability of filling the same day is to use the size of the gap. Figure 8 shows the win rate of fading various size opening gaps in the E-Mini S&P 500 futures index from 1998–2007. As you might expect, the smaller the gap, the more likely it was to fill or finish the day profitably. The tradeoff, of course, is that smaller gaps have less profit potential and one large gap loser can wipe out a whole string of small winners.

Gap Size As Percent of Index	Win %
<.2%	84.5
.2 - .4%	71.7
.4 - .6%	64.8
.6 - .8%	63.9
.8 - 1%	58.6
1 - 1.5%	49.1
> 1.5%	58.9

Figure 8. Gap Fade Win % by Size of Gap, 1998 -2007.

Gap Zone

Location. Location. Location. In doing research on gaps to develop my strategy, I identified a series of “gap zones” that have a clear impact on the probability that a given gap will fill. These zones refer to the location of the gap relative to the prior day’s direction and key price levels: Open, High, Low, and Close. Figure 9 shows the average win rates by zone, for fading opening gaps > 1 point in the E-Mini S&P 500, using no stop, and closing at the end of the day if the gap did not fill.

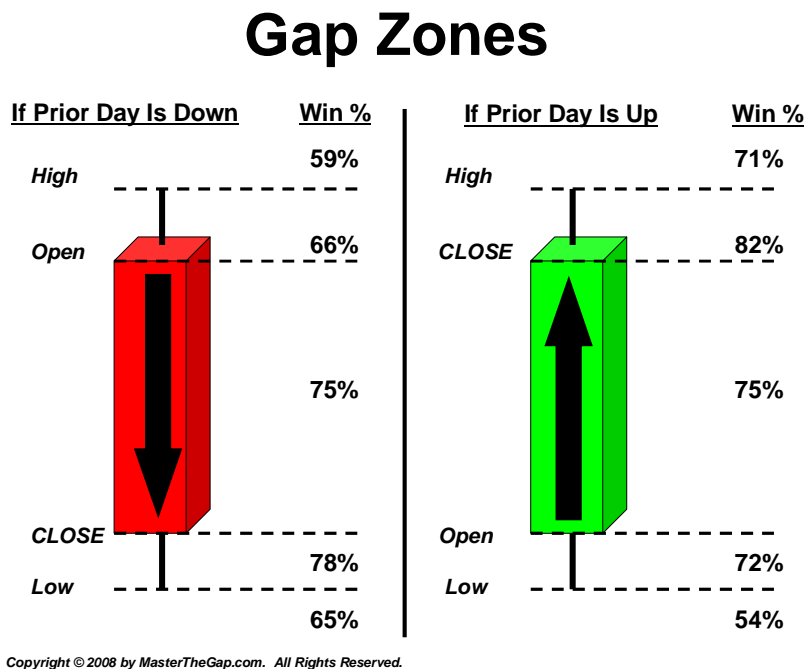


Figure 9. Average Win Rate by Gap Zone, 1998 – 2007.

The gap zone dimension is very powerful since it inherently incorporates gap size, prior day trend, and trader psychology. Although it may seem a little counter-intuitive on the surface, it is actually quite logical. For example, a gap up above the high of a prior “up” day (i.e. prior day’s close was greater than its open) may be more likely to attract profit taking at the first sign of resistance, than a gap up above the high of a prior “down” day (i.e. prior day’s close was less than its open) which would be counter to the prior day trend and may be more likely to attract new buyers and short covering. The probabilities in Figure 9 demonstrate this by showing that fading gaps above the high of prior “up” day have a much higher win

rate historically (71%) than fading gaps above the high of a prior “down” day (59%).

Tip: You can expand the concept of “gap zones” to include the preceding several days (or more) of price action to identify patterns with even higher probability and/or profit expectancy.

Seasonality

“Seasonality” (i.e. historical tendencies based upon various calendar criteria) is another helpful tool to filter gap setups. Some days and months clearly offer better odds of success than others. Figures 10 and 11 show the win rate of fading gaps in the E-Mini S&P 500 by day of the week, and by month. Notice how overall win rates tend to be higher in the middle of the week and how success rates vary by direction of the gap fade as well. May and September, traditionally transitional months for traders heading into, and returning from, summer vacations, produces the lowest overall win rates.

	# Gaps	Total Win %	Long Win %	Short Win %
Monday	377	70.8%	69.5%	71.9%
Tuesday	392	74.0%	77.2%	70.9%
Wednesday	400	76.5%	72.1%	80.5%
Thursday	390	73.9%	74.4%	73.4%
Friday	384	72.4%	70.3%	73.9%

Figure 10. Win Rate by Day of Week, 1998 – 2006.

Month	# Gaps	Total Win %	Long Win %	Short Win %
January	155	73.6%	71.4%	75.0%
February	134	77.6%	75.9%	79.0%
March	174	72.4%	74.0%	71.0%
April	158	74.7%	72.3%	76.3%
May	167	70.1%	66.2%	73.1%
June	157	75.8%	78.7%	73.2%
July	170	75.3%	71.3%	78.9%
August	169	72.8%	68.7%	76.7%
September	158	63.9%	63.1%	64.9%
October	180	77.8%	81.3%	73.4%
November	166	76.5%	77.5%	75.6%
December	154	72.1%	72.9%	71.4%

Figure 11. Win Rate by Month, 1998 – 2006.

Tip: Seasonality studies can also be expanded to day of the month (1-31) and even zone-specific seasonality. A word of caution: be sure that the number of gaps in your evaluation is statistically significant (e.g. > 30) and be careful not to over-optimize.

By combining gap size, direction, zone, and seasonality, gap traders can dramatically increase their success in selecting winning gap fades. Though certainly not foolproof, a significant edge can be gained versus other market participants who are less well informed.

Stop Size

Gap selection is only half the battle in creating a profitable gap strategy. The other half is choosing the optimal size stop and target price. This is where it can get a little tricky and counter-intuitive for strategy development. The smaller your stop loss (i.e. risk), the lower the win rate and vice versa: the bigger the stop loss, the higher the win rate. The key is to balance the two at a point that provides optimal profit expectancy within your individual risk tolerance.

Figure 12 shows the historical win rates and profitability for fading gaps > 1 point in the E-Mini S&P 500, using stop losses based upon a percentage of the size of the gap.

Stop As % of Gap Size	% Win	Average Win/Loss Ratio	Profit Factor
25%	21.4	3.49	0.95
50%	36.0	1.80	1.01
75%	47.0	1.18	1.05
100%	53.7	0.91	1.06
125%	59.0	0.73	1.05
150%	61.8	0.64	1.04
175%	64.7	0.57	1.05
200%	66.1	0.53	1.03
Note: 1998 – 2007, E-Mini S&P 500 futures.			

Figure 12. Win Rate and Profit Factor by Size of Stop (Percentage of Gap Size).

For example, per Figure 12, fading a 4 point gap in the E-Mini S&P futures using a 2 point stop, would have only been profitable approximately 36% of the time historically, with an average profit almost twice that of the average size loss. Losing 2 points twice for every time you would make 4 points would result in a breakeven strategy and hence the profit factor of 1.01 as shown in the table.

I trade the opening gap in the E-Mini S&P 500 and find it easier and more effective to simply use a fixed number of points as a stop for each gap zone. I do not vary the size of the stop based upon the size of the gap since Figure 12 shows this is generally not effective or profitable. (Note: profitability can be enhanced by using stops tailored for each zone since some require bigger/smaller stops than others.) Each point for a futures contract equates to a specific dollar amount. For the E-Mini S&P one point is equal to \$50.00 per contract. Figure 13 shows win rate and profitability when using stops based on a number of price points in the E-Mini S&P 500.

Stop Size (pts)	% Win	Profit Factor
1	23.5	0.85
2	39.2	1.04
3	48.8	1.11
4	55.5	1.13
5	60.1	1.15
6	63.5	1.15
7	66.2	1.17
8	67.4	1.13
9	68.6	1.11
10	69.4	1.09
12	70.8	1.10
14	71.6	1.07
16	71.8	1.05
18	72.0	1.03
20	72.2	1.02
Note: 1998 – 2007, E-Mini S&P 500.		

Figure 13. Win Rate and Profit Factor by Size of Stop (Points)

Target Optimization

Many traders only focus on gap selection and stop size when developing their strategies; however, target optimization can make a significant difference in the profitability of your gap trading strategy. In fact, I consider target optimization to be a critical component of my success. If I am in a winning trade and gaps into that zone have a proven historical tendency of continuing through the gap fill, why would I want to cut my profits short? I would not and that is why I utilize “extended targets” (beyond the prior day close) for many of my gap setups. The table in Figure 14 shows the win rate when targeting $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, and full gap fills, as well as points beyond or through the gap fill, over the past ten years.

Target as % of Gap Size	Win %
25%	89.7%
50%	83.5%
75%	77.2%
100%	72.8%
125%	67.9%
150%	65.1%
Note: 1998 – 2007, E-Mini S&P 500.	

Figure 14. Win Rate Using Targets Based Upon Percentage of Gap Size.

Tip: Some “gap zones” are especially prone to trading through the gap fill price, so be sure to look for these extended target opportunities when developing your strategy. The trade-off in win rate versus profit expectancy can be quite good.

Perhaps you are thinking you could simply choose the optimal gap profile (by size, zone, and seasonality), target $\frac{1}{4}$ gap fill, and use a reasonable stop, and you will be swimming in profits right? If only it were that easy. This approach will indeed result in a gap strategy that will have a very high win rate. But, it will likely make little, if any, actual profits since the average size loss will greatly exceed the average size winner.

The name of the game is to be selective in choosing gaps to fade and to utilize stops and targets that generate maximum profits long term with an acceptable win/loss ratio and “draw down” ratio for your trading style and account equity. If you are new to gap trading, creating a profitable strategy may seem a bit overwhelming, but hang in there. The next chapter will demonstrate a variety of real world examples.

Real World Examples

So now that your head is swimming in a puddle of probabilities, let's try to bring it all together. In this chapter we'll examine specific examples of how I use gap zones, gap size, and seasonality on a daily basis to make a living as a gap trader. Included are a variety of different opening gap fades, many that were profitable and some that weren't, as well as examples of "go with" and "fade the fill" trades, and even one gap setup that I never fade.

How I Trade Gaps

My gap strategy was initially developed using a simple Excel® spreadsheet. After many long hours of sifting through spreadsheet data, I identified the "gap zone" edge and converted it into a TradeStation® application that I fondly refer to as "Otis." In a nutshell, Otis is a pattern recognition program that identifies an average of eight to ten "high profit expectancy" gap trade setups per month in the E-Mini S&P 500.

This system, like all others, is not the "Holy Grail." Otis will miss winning trades; however, by design, misses even more losing trades. By avoiding overly large losing trades while taking both long and short trades in all market conditions, the system rarely suffers large or lengthy draw downs. It has worked well consistently through a variety of market conditions volatile and non-volatile, bear, bull and non-trending markets.

Before digging into some real world examples, it might be helpful to review the key elements of my approach to trading gaps:

Zone-Based: All gaps are grouped by recent price action (up or down) and various support and resistance areas (e.g. Open, High, Low and Close of the

two prior days). I call these areas “gap zones” and have many of them, each with a sub-zone and optimized targets and stops.

Direction: The vast majority of my gap trades are "fades" (opposite the direction of the opening gap). I have a couple of zones in which I will not fade the gap, but rather "go with" and trade in the direction of the opening gap.

Pre-market Filters: My pre-market filters are based primarily on where the gap opens (i.e. gap zone).

Big Gaps: I do not unilaterally eliminate large gaps (i.e. over 5 - 6 points), but focus instead on the zone. The larger gaps have lower fill probabilities, but many will finish profitably even if the gap does not fill. Plus, the big gaps provide very nice profits when they work and are a necessary part of my gap system.

Small Gaps: My research also shows that gaps less than 3 points in select zones should be avoided, because their “profit expectancy” is negative or too low. This is counter to what many gap traders believe.

Decision Time: I make my decision on whether to trade an opening gap or not, based upon where prices are trading at 9:25 ET (five minutes before the open of the regular session). Most of the time, I know well before this time, but sometimes I have to wait.

Position Size: I trade one contract for every \$10,000 of equity in my futures account. This ensures that I never suffer a full size loser that exceeds my max allowable money management loss on a single trade, while keeping draw-downs in a range that is psychologically tolerable.

Risk Management: If I get a signal from Otis, but have identified one or more risk factors such as seasonality, proximity to a “go/no go” line, or a zone-specific risk (e.g. weaker performance during bull or bear market conditions), then I will reduce my position size in half.

Stops: Stops are optimized for each zone, based upon points or a percentage of the gap amount, whichever is less. For some zones, I use a time-stop and will exit if the gap trade is still open when the stop time is reached.

Targets: Some zones have a high probability of not only filling, but also continuing through the prior day close. Optimizing my target for each zone allows me to maximize profits and take full advantage of each gap trade. The key is to know which ones to hold for gap fill, beyond the gap fill, or to close in front of the gap fill.

Entry Technique: I enter all gap trades at the open of the regular trading session (9:30 ET) using a market order that I place using TradeStation. When I get a signal from Otis, I manually set up a time-activated (9:30:00 ET) market OCO (“One Cancels Other”) bracket order. Then, I generally leave it alone, letting it fill me at the open and exit at my target or stop. Note: if my trade has not hit its target or been stopped by end of the day (or earlier if my research suggests a time stop), then I will close the position. Intraday gap trades are not swing trading setups and I never hold them overnight.

Gap Fade Examples

The following trades are examples of real gap fades that I personally executed. I post the details of each gap play on my web site (www.masterthegap.com) before entering each trade at the open of the regular session. You’ll note that I use quite a few zones, each with their own parameters in these examples. I suggest you focus on the concepts that I utilize to trade gaps, rather than the specifics of the various examples. By focusing on the big picture, you should be able to grasp the basics of how to evaluate gaps beyond simply looking at the size of a gap.

Figure 15 is an example of a gap fade that occurred following a “down” day (prior day’s closing price was lower than its opening price). This particular gap opened above the prior day’s open, but lower than its high price and in a zone that is sometimes unpredictable, hence my nickname for it: “Sybil” (after the star of the classic 70’s movie who had multiple personalities).

The S&P futures rallied in the morning almost 20 points from the overnight low and were nicely positive by the open (thanks to better than expected jobless claims data). Since I have not identified an edge for incorporating economic news into my decision-making, I simply ignored this positive report and the market's reaction that followed. The 4.25 point gap up met all of my criteria for this tricky zone (i.e. pattern, seasonality, and size) and showed solid profit expectancy historically, so I faded it at the open with an extended target (i.e. below the prior day closing price). After taking a couple points of heat (i.e. prices moved opposite the direction of my trade), the markets stalled and traded down to and through the gap fill. I scaled out for an average of +5.5 points (\$275 per contract), closing the last part out for +8.5 points after hitting my target and just before the markets made an extraordinary reversal and moved up almost 30 points.



Figure 15. Gap Fade, 4-24-08.

The next gap fade example (Figure 16) illustrates a gap down following an “up” day. This setup met my criteria for this zone and was also supported by excellent seasonality for Tuesdays and this period of the month, both which favored the long side. After a worse than expected inflation report, the markets sold off and held near the lows of the morning, prior to the open. As I have learned over the years, economic reports are often traded primarily by the "dumb money" and those seeking to take advantage of the dumb money. Sure enough, after opening down almost 6 points, the S&P futures did a 180 degree turn immediately after the regular session open and traded straight up, filling the gap around 9:45 ET.

I scaled out and locked in +5.0 points on 70% of my position just in front of the gap fill and tightened my stop just a little on the last 30%. Knowing that seasonality was in my favor and that this particular setup works about 80% of the time when targeting prices ABOVE the prior day close, I was not anxious to tighten my stop too much since I wanted to give this signal room to work. By being willing to accept a loss on the last part, I was able to remain in the trade even though it went negative on me after hitting my first target. After taking a little heat, it reversed rapidly and I sold 20% at +8.5 points and then held the last 10% for the open gap from early February at 1379 for +13.0 points. By sticking with my plan I was able to capture 6.5 points of profit (\$325 per contract) on a 5.5 point gap.



Figure 16. Gap Fade, 2-26-08.

This next gap fade example in Figure 17 also followed an “up” day and shows a 5.25 point gap up (above the prior day close). Seasonality favored a short play and coupled with a somewhat rare, two unfilled “up” gaps in a row this particular week, I was more than ready to fade this gap which opened just below its prior day high price. My nickname for this zone is the “Gotcha” and the post open price action shows why.

My research on “Gotchas” shows that they have a high probability of selling through the prior day close, so I scaled out half at gap fill, and after a couple bounces, my second target was finally hit for +7 points.

After one more small rally by the bulls, the S&P futures tanked. Knowing that a break of the lows would likely run a few stops and fall through my final target, I

moved my extended target down to capture more profits. This was a good call (I closed out at 1359.25 for +10 points), though a little conservative in retrospect as the selling held steady into the close, filling the prior day's unfilled gap at 1349.75. Total profit for the trade was an average 6.6 points (\$330) per contract in little over an hour and half.



Figure 17. Gap Fade, 2-14-08.

Figure 18 is an example of fading a gap down that followed a “down” day (the close was lower than the open). On the surface, this gap looks even more bearish than one which follows an “up” day. Counter-intuitive as it may seem, that is exactly why Otis' long signal for this zone works so well and why it is one of my most profitable. I decided to trade this setup with a half size position due to the fact that this signal doesn't work as well in bear market conditions (though still nicely

profitable) and historical seasonality shows this part of the month is prone to selling pressure (or perhaps void of normal buying pressure).

Since the bears had controlled the prior day, this down gap looked as if the down trend would continue and attracted some sellers after the open. As they shorted and drove prices down to the prior low, I started getting a little concerned. Otis, my system, had suggested using a slightly bigger than normal stop to accommodate any potential continuation of the prior day's selling, so I had a little breathing room, though not much. Ironically, this move down also gave me more confidence in holding out for an extended (above gap fill) target, assuming that I was not stopped out first. But why?

The normal human trader reaction after enduring a near stop is to over-react and close out if prices return to one's entry or to at least move the target closer. Sometimes that is the right action, but often as I have learned, that is exactly the wrong thing to do. If anything, you should consider moving your target further away. The reason is simple: the same momentum that almost stops you out will serve as the fuel for the reversal. This is a nice example. Sellers after the open were forced to cover after buyers (and perhaps sellers who had shorted the prior day decided to lock in profits) stepped in at yesterday's low. When prices reached the opening price and no new sellers showed up, those that had shorted after the open became nervous. Once prices traded up near the prior close (gap fill) and buyers, not sellers appeared, they panicked and helped drive prices upward and well above the gap fill price as they bought back contracts to cover their short positions. I closed 80% for 6 points and then held the last part for +8 for an average win of about 6.5 points (\$325) per contract on a 3.5 point gap. That works.



Figure 18. Gap Fade, 4-10-08.

Here's a gap fade (Figure 19) that didn't work out as planned. In some regards it is similar to the prior example, other than the final results.

After better than expected retail numbers, the S&P futures opened with a small 2 point gap down below the prior close, but above the low of this prior "down" day. After what seemed like an eternity, buyers finally succeeded in filling the gap, but sellers then drove prices back down. Lunch time buying then reversed the futures once again, driving prices all the way to and through the prior close, falling short of my extended target (above gap fill) by a couple of points. This was not close enough for me to take any profits, though I was concerned prices might tank if they broke the prior day's lows one more time. Prices did sell off some more, but stabilized late afternoon and I closed this trade for a small loss.



Figure 19. Gap Fade, 4-14-08.

In the example shown in Figure 20, the S&P futures opened up about 7 points due to a couple of reports (PPI and Empire Manufacturing) that were better than expected or perhaps more accurately stated, "not as bad as feared." Regardless, as mentioned before, I pay little attention to these reports other than to get a feel for the opening gap and potential trader psychology for the morning session.

At my 9:25 ET decision time, prices were trading above the high of a prior "down" day and this particular setup met my criteria for fading at the open. There have been less than 100 gaps in this zone over the past 10 years. About 2/3 were tradable per my parameters and 80% of these hypothetically would have been winners with a historical profit factor that is among my highest.

The only concern I had was the fact that we had been selling off quite steadily the prior six days and coming into the middle of the month, we might pick up some new money inflows. But, Otis said "sell" and I knew that history was on his side, so I went short at the open with my target just above gap fill. It was a good call as prices sold off immediately and hit the target in about 40 minutes. I closed 80% at +4 and 20% for +5.5 (just above gap fill) for an average of +4.3 points (+\$215) per contract.



Figure 20. Gap Fade, 4-15-08.

Figure 21 shows a small gap up above the close of a prior down day that triggered my "Cowboy" signal. Shorting up gaps on Wednesdays has a much higher than normal success rate historically, so this was an easy trade for me (despite the two losses that preceded this trade). My plan was to evaluate the market price action and internals after the open to decide whether to scale out at gap fill or hold the

entire position for the extended target (below the gap fill) - which is what Otis, my gap system, was recommending.

I opted to take half off at gap fill for +2.75 points and hold on to the other half until my extended target was reached. It was a bad decision to scale out in retrospect as the market barely burped upon filling the gap, but it was a solid, easy win nonetheless. I closed the second half for +7.25 points. Though it was not easy to trade a full size position on the heels of two back-to-back losers, this 3 point opening gap delivered 5 points (\$250) of profit per contract in just 14 minutes.

I have learned over time how important it is to: a) trade position size that does not overly stress you (financially or emotionally) - even if you have three or four losers in a row; and b) stick with a system and not try to guess which trade will work or not. Sometimes this results in a few weeks or more of treading water, or even suffering a painful drawdown, but over the long haul this discipline has paid me many times over. By following my system closely, I eliminate the “me” variable and can better determine if a signal needs to be tweaked. Plus, I rarely go to bed mad or disappointed in myself, only my system. And, from a trading psychology perspective, that is a good thing.



Figure 21. Gap Fade, 2-6-08.

Figure 22 demonstrates a losing gap fade. Though I lost money on this specific trade, there were some positive elements worth noting. This gap was the second one above the high of a prior “down” day in as many days, and again, Otis gave a short signal. Considering this is my rarest of signals, I checked the past 10 years of history, and this has only happened one other time and that resulted in a losing trade. My seasonality research showed that the 16th of the month is the worst performing day historically for fading gaps in the S&P futures (~60% win rate using no stop. The reason is likely due to the fact that the middle of the month is when new money often comes into the market from pensions and other institutions).

To make matters worse, the E-Mini S&P 500 price at my decision time was barely inside my signal area. Darn it. There was no way around it. This setup had some serious risk factors, yet Otis was giving a valid signal that has a 79% historical win

rate and better yet, today's specific pattern has been profitable 86% of the time. I could not pass on this signal, even though my gut was screaming “no!”

So, I followed my rules and took the signal, but only used a half-size position due to the day of the month seasonality risk and proximity to my “go/no-go” line. After the open, it was pretty clear that market internals were overwhelmingly bullish and shortly thereafter the markets rocked upwards about 10 points, stopping me out of my trade for a 6 point (\$300 per contract) loss. Now it was clear: this might be a continuation gap. This high probability gap setup had been stopped out and internals and price action were very bullish. It was time to take off my contrarian cap and become a trend trader. Over the course of the rest of the day, I went long five times, netting four winners and some nice day trading profits.

Including seasonality in my decision-making process helped me avoid a full size loser. And, by recognizing early in the session that this was likely a continuation gap I was able to focus on trades to the long side in the direction of the gap. Though at times it was hard fighting my counter-trend instincts, it paid off nicely and helped offset a disappointing morning.



Figure 22. Fade of a Continuation Gap for a Loss, 4-16-08.

The following gap setup (Figure 23) was one in which I did not fade since it was what I call a “BLUD” gap: Below the Low of an Up Day. To be clear, this is a gap that opens below the low of a prior “up” day (i.e. prior day close was higher than its open). I never fade “da’ BLUDs” at the open since they are generally bearish and have the lowest historical fill rates (about 50% - even when using no stop) of all zones that I have tested. As such, it is the only zone in which I do not have a fade play with acceptable profit expectancy worthy of trading.



Figure 23. Example of BLUD Gap that I did not fade, 2-28-08.

“Go With” Example

Though the natural and historically proven bias of most gaps is to retrace some or all of the overnight session price move, some gap zones have an equally strong tendency to continue in the direction of the gap after the open.

In this example (Figure 24), the prior day was an "up" day, meaning the closing price was greater than the opening price. However, the close was below the close of two days ago, so the S&P actually exhibited a little weakness relative to its prior day. When prices opened with a gap down the following morning, the market was again exhibiting weakness. On this day, Otis generated a "go with" (i.e. sell signal). Think about it. In spite of buying pressure the prior day, it was not enough to make

up for a sizeable gap down and then this morning it gapped down again. This kind of action was likely to attract some short sellers and profit takers.

So, when Otis said to consider a short at the open, it was based upon a pattern that has happened many times over the past 10 years and therefore provided a statistically significant edge for shorting at the open; in fact it works about 80% of the time. This is not a big profit making signal because it sometimes requires that the stop be placed in the path of the gap fill (today's small size stop was just above the gap fill), so I consider it as a discretionary play.

This is hard signal to take for most "gappers," yours truly included, since it goes against my contrarian nature. This specific trade was a little easier though since, historical seasonality showed that shorting "up" gaps has a very high win rate on this day and time of the month (> 80%). I've noticed that when seasonality is lopsided like this it often indicates the general bias of the monthly cash flows. After a couple points of heat, sellers stepped up in front of the gap fill and drove the markets down. I scaled out and took my last profit around the overnight low area for a 3 point average (+\$150) winner, scaling out at +2, +3 and +5 points, in just 30 minutes total for the trade.



Figure 24. “Go With” Gap Trade, 4-9-08.

“Fade the Fill” Example

Fading the open and going with it, are not the only trades presented by gaps. Depending on the zone and market conditions, it is often quite profitable to fade the closing of the gap. That is, after prices retrace the overnight move back to the prior close, enter a trade in the direction of the opening gap.

For the second day in a row, the S&P had gapped down in historic proportions ($>2.5\%$), and for the second day in a row it started filling immediately after the open and actually filled without taking virtually any heat. Today's gap fill was the 4th largest in the past ten years for the S&P 500 (see Figure 25). Since it was so unusually large, I did not get a signal to fade the open.

Knowing that the gap fill also coincided with the prior day high price and knowing that this zone will often sell off aggressively after a quick gap fill (hence my nickname for this particular gap fade setup: "Wham, Bam!") and often finish the day below the open, I decided to fade the gap fill. I went short at 1309.0 around 10:15 ET as the gap filled and used a 4 pt stop. I sold half at +4.0 points and then sat on my itchy fingers as the markets proceeded to sell off. Around 12:45 ET the massive dump appeared to be over, so I closed out at 1273.0 for a sweet 36 point gain (+\$1,800) per car, my largest intraday trade profit ever. Unfortunately, I was so busy bragging to my wife that I missed the ensuing 74.5 point rally! Note to self...



Figure 25. “Fade the Fill,” 1-23-08.

Gap Trading Tips

- 1) **Know the zone!** Where the gap opens relative to prior day support and resistance (e.g. Open, High, Low, Close) will greatly influence its probabilities of filling, as well as the optimal placement of your stop and target.
- 2) **It's a three legged stool.** To maximize profits focus on gap selection, stop placement, and target optimization. It takes all three.
- 3) **Don't try to kiss all the pretty girls (or guys)!** With gap trading, it pays to be selective. So, when in doubt, sit it out.
- 4) **The return may not be worth the risk.** Just because a gap is small and has a high probability of filling does not mean that it is worth trading. Profit expectancy, not probability of winning, is the key.
- 5) **'Tis the season!** Understanding the historical calendar tendencies of your market can help affirm a winning setup, as well as help you avoid losers.
- 6) **The worse it looks, the better it works.** And vice versa (most of the time). Don't let pre-market action overly influence your decision to fade a gap or not.
- 7) **The news is noise.** Don't worry about the financial or economic news that caused the gap. It will only add unnecessary confusion and second-guessing.
- 8) **Low hanging fruit is the sweetest.** Entering at the market open catches all the easy winners. Waiting to enter after the open misses the easiest winners and catches all of the losers.

- 9) **Like money sitting on a table.** Many gap setups are prone to continuing through the prior close after filling. Know the personality of your gap setup and when to hold through the gap fill for an extended target, or when to close before the gap fills.
- 10) **Size matters.** Trade the position size that does not overly stress you, financially or emotionally, even if you have three or four losers in a row.
- 11) **Watch out for the BLUDs.** Fading gaps Below the Low of a (prior) Up Day is only profitable about 50% of the time historically.
- 12) **The three amigos.** Don't forget about the other two gap plays: "Go With" and "Fade the Fill." They can add winning setups to your trading tool box.
- 13) **Focus on the horizon.** Let the long term probabilities work to your advantage and don't try to guess which trade will work or not. Have a plan, follow your rules, and accept that losers are the cost of doing business.

Get Started!

If you have made it this far, then you realize that trading gaps offers compelling profit opportunities and many other advantages for traders and active investors. However, just like all trading strategies, the road to consistent profits is full of potholes and can be challenging and frustrating at times.

Although I have attempted to cover the key elements for understanding gaps and creating a profitable opening gap strategy, I expect there are plenty of unanswered questions in your mind. That is normal and to be expected at this point. The journey to becoming a successful trader requires a map and some signposts, but you'll have to blaze the trail that works best for your individual style and goals.

The next step is to dip your toe in the water and start learning hands-on. Here's what I recommend for becoming a "gapper":

- 1) **Select a market.** One is all you need. I prefer the e-mini index futures for the S&P 500, Dow, NASDAQ 100, and Russell 2000 - all work quite well for gap trading. Or, you can go with the exchange traded index fund for each like the SPY, DIA, or QQQQ. Individual stocks will work too, as long as they are volatile enough to provide tradable gaps. Additionally, you can trade gaps using options, however, these instruments introduce an additional set of variables like spread, premium, delta, time decay, etc. that increase complexity quite a bit.
- 2) **Research!** It might be a scary word to you, but it is a critical element of developing a winning gap plan. Plus, there are many ways to study gaps for a given market:
 - a. Download the historical data for your market into a spreadsheet application like Microsoft Excel®. Include at a minimum, the daily (regular session) Open, High, Low, and

Close prices. Then, analyze fill rates using zones and other criteria. You can use the price zones that I identified in Chapter Two, modify them, or make up your own. The key is to use a structured approach for organizing and studying the various types and sizes of gaps.

- b. Use an advanced application such as TradeStation (www.tradestation.com) or WealthLab (www.wealth-lab.com) to back-test the historical performance of different gap strategies using a variety of filters, stops, and targets.
 - c. Gather ideas and existing research from web sites and services such as www.masterthegap.com. There are many other quality sites too, with helpful nuggets and techniques to consider, so look around. Additionally, be sure to check out the bibliography at the end of this book for a long list of additional sources of gap-related information.
- 3) **Create a draft business plan for trading gaps.** Specifics should include your market, historical probabilities, goals, designated brokerage, detailed trading plan, timeline (for testing, adjusting, and live trading), and results tracking and analysis. Your trading plan should include gap selection criteria, order entry method, stop size, targets, scale-out plan (if applicable), position sizing, money-management rules, and contingency planning (e.g. how many losses in a row will you endure before stopping and reevaluating your plan?) If applicable, be sure to break out your specific criteria, stops and targets for each zone or class of gaps that you plan to trade.
- 4) **“Forward test” your plan.** It is important to test your gap trading plan in real time (not necessarily with real capital) for a month or two or more, to confirm that the number of trades, win rate and profitability are within your expectations and worthy of trading with real capital. Plus, if you plan on closely monitoring your trades after entering, the forward testing period will help you learn to manage your emotions and trust your plan. You

might want to also consider using a trading simulator from your broker to practice order execution. If you decide to test using real capital, use the smallest position required to simulate your strategy. From my own experience, it is not hard to goof up the placement of a multi-exit bracket order, especially when trying to enter at or near the market open.

- 5) **Trade your plan.** When you are satisfied with your gap strategy and risk management plan, it is time to “go live.” I strongly suggest that you start with a very modest position size for the first month to ensure that you have the trade mechanics mastered (especially if you are new to trading) and to reduce your risk as you will invariably stumble upon a scenario or two that has not been addressed fully in your plan. Trust me, there will be some.

Before I wrap up, let me share a few more important considerations:

- **Position Size.** When you decide to increase your position size, do so only if you are fully committed to sticking with that size trade no matter what. I once increased my size after five successive winners in a row, only to suffer through four consecutive, agonizing losers. My longest losing streak coupled with my largest position size, resulted in an extremely taxing situation for me psychologically. Thankfully, my plan allows up to five losses in a row and I was still within my max allowable dollar drawdown, so I stuck with it. Over the following three months, I had seventeen winners out of twenty-one gap trades, making up for my losses and growing my account by 30%. Had I reverted to my prior position size, it would have taken much longer to recover.
- **Optimization and Sample Size.** If you use a back-testing application, be very careful not to over-optimize your criteria. At a minimum, be highly cognizant of the risk. Many a strategy has failed miserably when applied in real time due to it being overly “fitted” to past data. There are entire chapters and books on this complex subject, so read up and be careful. A related risk with creating strategies is placing too much confidence in a small sample of data. For example, it is entirely possible for a gap setup that has worked four times out of five to be less than a

50% winner over the long term. Generally, I prefer to have at least 30 (preferably many more) data points before I consider the worthiness of a gap setup or strategy.

- **Realistic Expectations.** One of the greatest downfalls of many gap traders is having unrealistic expectations regarding an acceptable winning percentage. Some traders, for reasons unknown to me, believe that they should be able to trade the vast majority of gaps, win 80% or more of the time, AND have an average size profit that is greater than the average size loss. It just doesn't work that way. Generally speaking, you can only find gap strategies that meet two of these criteria; and only at the expense of the third. The reason is simple. No one in the world knows what is going to happen tomorrow after the markets open. Will the buyers or the sellers be more motivated? Who knows. As gap traders, all we can do is identify those historical patterns that provide a clue as to the probability of a gap filling or not, and then trade it with a target and stop that are mathematically oriented in our favor over the long term.

To quote a trading legend, George Soros: *"It doesn't matter how often you are right or wrong - it only matters how much you make when you are right, versus how much you lose when you are wrong."*

Conclusion

If there is such a thing as a perfect trading setup, it might be the opening gap. It not only offers the potential for an extremely high return on investment, but also an equally high "return on effort" and "return on time." In my opinion, these three factors warrant the investigation and consideration of the opening gap trade for any active investor or serious trader (part-time or full time) and especially the "newbie" trader looking for a simple setup. Furthermore, understanding the opening gap provides the added benefit of better anticipating the daily price action and improving your entry timing on longer term swing and position trades.

There are many ways to play gaps. In this book I have shared some gap trading basics that are applicable to most techniques, as well as details regarding my own approach. I hope that you have learned a little and have found some ideas and information that will help you augment your existing gap strategy, or create one from scratch. As my flight instructors used to say, “You have the controls!”

If you have any questions or comments, feel free to contact me or join our community of gappers at www.masterthegap.com. Carpe diem!

Glossary

BLUD Gap: An opening gap that is in the zone that is "Below the Low of an Up Day." Gaps in this area are generally difficult to trade and bearish by nature. Fading these gaps is very risky as this zone has the lowest of all historical fill rates for most markets.

Breakaway Gaps: These gaps occur after a period of price consolidation. They are caused by a surge of demand to buy or sell the market, typically in response to a significant event. The gaps are not filled during the same trading day (often not for many days or weeks) and are associated with above average volume. See Figure 2.

Common Gaps: These gaps occur throughout a market's typical ebb and flow in response to a wide variety of events and news. They are often associated with average or below average volume and generally fill the same day. See Figure 3.

Continuation (or Runaway) Gaps: These gaps occur during, and in the direction of, an ongoing trend and are generally viewed as confirmation of a trend's strength. They are associated with above average volume and often do not fill the same day. See Figure 4.

Exhaustion Gaps: These gaps occur at or very near the end of a trend. They are typically associated with very high volume as the very last buyers (or sellers if the asset is in a downtrend) jump aboard a trend that is ending and are overrun by opposing market forces as prices stall and often reverse sharply that day. See Figure 5.

Extended Target: This term refers to the placement of an exit price for a gap trade that is beyond or through the gap fill area (prior close). It is often quite profitable to trade gaps using an extended target if your research supports the probability of price continuation.

Fade: This term simply means to enter a trade in the opposite direction of the opening gap. For example, to fade an "up" gap, you would "sell" a.k.a "go short." To fade a "down" gap, you would "buy" a.k.a. "go long."

Futures Contract: A standardized financial obligation for a buyer to purchase an asset (or the seller to sell an asset), such as a financial instrument or physical commodity at a pre-set future date and price. Futures are used to hedge or speculate on the price movement of an asset. While a futures contract does obligate the trader; in real life, this obligation is avoided by simply exiting the position, much like selling a stock in the equity markets would close a trade.

Gap: The most common definition of a “gap” is the difference between an asset or instrument’s opening price and its prior day closing price. This difference shows up visually on a technical price chart as an open space or “gap.” (Note: some traders define a gap as the difference between the prior day high or low and the next day’s opening price. However, this text references the difference between the open and prior day close.)

Gap Down: An opening price that is below the prior day closing price.

Gap Up: An opening price that is above the prior day closing price.

Gap Fill / Close: When prices pull back from the open of a session and retrace all the way back to the prior session’s closing price, the opening gap is considered to have “filled” or “closed.”

Gapper: Someone who trades the opening gap in a market.

Go Long: This is when you buy a security in anticipation of being able to sell it later at a higher price for a profit.

Go With: This is a trade where you trade in the direction of the opening gap (as opposed to fading it). Gaps into some zones increase the likelihood of a continuation or breakaway gap and therefore are less likely to fill and may be candidates for “going with” the gap.

Profit Expectancy / Expected Value (EV): How much profit per trade one would expect to average over time (based upon historical averages) for a given setup. The formula: (average profit per winner * probability of winning) - (average loss per loser * probability of losing). This is also known as EV or "expected value." Note: this number is far more important than just the probability of profits. It may *feel* good to have a high winning percentage, but it may not be profitable over the long term.

Profit Factor (PF): This is another way to measure the attractiveness of a trade setup. It is the historical net profits of a strategy (generated by the winning trades) divided by the historical net losses of the losers. A profit factor greater than 1.0 would be a money making strategy and less than 1.0 would be a losing strategy. The bigger the profit factor, the greater its long term profitability and attractiveness.

Regular Session: This term is synonymous with the “open outcry” or pit session hours for a given market, e.g. 9:30 – 16:15 EST for the S&P 500. Many markets trade nearly 24 hours a day electronically; however, the bulk of volume is transacted during their “regular” trading hours. For this reason, the regular session’s open, high, low, and closing prices carry great significance for most traders and their systems.

E-Mini: An electronically traded futures contract on the Chicago Mercantile Exchange that is equal to only a small portion of a normal futures contract. E-minis contracts are available on many indices such as the S&P 500, Dow, NASDAQ 100, and Russell 2000. Trading E-mini contracts has many advantages for individuals, including high liquidity, low cost, and nearly 24 hour trading.

Short: This is when you sell a security with the anticipation of being able to buy it back at a lower price for a profit.

Win Rate: This term describe the percentage of trades for a given setup that hit their target or could have been exited at the end of the day for a profit.

Zone: An area of prices between support and resistance levels.

Bibliography

Source: Active Trader Magazine

- Bukey, David. "Filling in the GAP picture." November 2005 44-50
 Bukey, David. "New GAP Analysis." January 2007 14-18
 Bukey, David. "Double Gaps." March 2008: 14-20 .
 Babcock, Bryan C., & Agnelli, Arthur. "Morning Reversal Strategy" May 2003 36-40
 Carter, John, "Trading the Opening Gap" December 2004 54- 58
 Nassar, David. "Trading the Overnight GAP." March 2001 66-72
 Trading System Lab, "Gap Closer." (stocks) May 2003 54-55
 Trading System Lab, "Gap Closer." (futures) May 2003 66-67
 The Active Trader Staff. "Opening gap trader" August 2007 22-28

Source: Futures Magazine

- Angell, George. "Using GAP-4 to catch big moves" March 1980 44-49
 Connors, Larry & Raschke, Linda. "Plugging gaps with ADX" April 1996 38-40
 Kleinman, George. "Trading with Gaps" July 2002 38-40
 LeBeau, Chuck. "Knowledge:Gaps." January 2001 48-50
 Raschke,Linda. "Listen to Daddy." November 1998 34-36

Source: Stocks & Commodities Magazine

- Arms Jr. , Richard W. "Are there Gaps in Your Thinking" June 1990: 52-54
 Bigalow, Stephen. "Working Money: Sept.2002: 120-121
 Bigalow, Stephen. "Working Money: The Morning Star Dec. 2004: 54-55
 Bulkowski, Thomas. "Gauging Gaps" Sept. 2003: 30-34
 Calhoun, Kent. "Day Trading and Short-Term Trading Techniques Part 2" Sept. 1988
 Connors, Larry & dorkins, Ashton. "Laps and Gaps to get Your Edge" Aug. 2007: 32-34
 Downs, Walter T. "The Tactical Trader" Jan. 1999: 22-42

Harris, Mark. "Pseudo Stocks" Jan. 1991
 Gujral, Ashwani. "Working Money: Candlestick Filtering" Apr. 2004: 38-43
 Hartle, Thom & Bowman, Melanie F. "Gaps" Dec. 1990: 26-28
 Luis, Joe & Gopalakrishnan, Jayanthi. "What You Need to Know About Gaps"
 Sep. 2000: 32-39
 Ord, Tim "Price & Volume=Price Movement" May 2004: 68-71
 Penn, David. "Charting the Market" Dec. 2004: 99-100
 Reverre,Stephane. "Trading the Opening Gap" Nov. 1999: 22-26
 Reverre, Stephane. "Trade Against the Gap" Dec. 1999: 86-97
 Sarkovich PhD, Misha T. "Daytrading QQQ" Mar. 2003: 24-31
 Schmidt, Heidi. "Night Trading(the Impact on Technical Charts)" Feb. 1988:
 37-38
 Van Nice, Joe. "Gap Watching" Aug. 1987
 Wagner, Gary S. "Candlesticks and the Method of 3" March 1992: 62-67

Book References

Achelis, Steven B., Technical Analysis from A-Z
 New York: McGraw-Hill, 2001,(P. 249-250)
 Kirkpatrick, Charles D. & Dahlquist, Julie R., Technical Analysis the complete
 resource for financial market technicians
 New Jersey: FT Press, 2007 (P.263-264, 373-376)
 Larson, Mark L., Technical Charting for Profits
 New York: John Wiley & Sons, 2001 (P.87-88)
 Meyers, Thomas A., The Technical Analysis Course 3rd Ed.
 New York: McGraw-Hill, 2003(P. 65-80)
 Murphy, John J., Technical Analysis of the Financial Markets
 New York: NYIF, 1999,(P. 76)
 Murphy, John J., The Visual Investor:How to Spot Market Trends
 New York: John Wiley & Sons, 1996 (P. 70)
 Pring, Martin J., Technical Analysis Explained
 New York: McGraw-Hill, 2002 (P. 103-108)
 Pring, Martin, Introduction to Technical Analysis
 New York: McGraw-Hill, 1991, (P.127-136)
 Schabaker, Richard W., Technical Analysis and Stock Market Profits
 New Jersey: FT Press, 1998, (P.245-262, 345-350)
 Schwager, Jack D., Technical Analysis on Futures
 New York: Wiley & Sons, 1995 (P. 196-199)
 Schwager, Jack D., Getting Started in Technical Analysis
 New York: John Wiley & Sons, 1999, (P. 73-75, 158-162)

Current Publications of Traders Press, Inc.®

12 Habitudes of Highly Successful Traders	Ruth B Roosevelt
A Comparison of 12 Technical Trading Systems	Lukac & Brorsen
A Complete Guide to Trading Profits	Alexander Paris
A Professional Look at S&P Day Trading	Don Trivette
A Treasury of Wall Street Wisdom	Schultz and Coslow
Ask Mr. Easy Language	Sam Tennis
Astro-Cycles: The Trader's Viewpoint	Larry Pesavento
Channels and Cycles: A Tribute to J M Hurst	Brian Millard
Chart Reading for Professional Traders	Michael Jenkins
Charting Commodity Market Price Behavior	L Dee Belveal
Cyclic Analysis:	J.M. Hurst
Dynamic Trading	Robert Miner
Essentials of Trading	Pesavento & Jouflas
Exceptional Trading: The Mind Game	Ruth B Roosevelt
Fibonacci Ratios with Pattern Recognition	Larry Pesavento
Futures Spread Trading: The Complete Guide	Courtney Smith
Geometry of Stock Market Profits	Michael Jenkins
Harmonic Vibrations	Larry Pesavento
How to Trade in Stocks	Jesse Livermore
Investing by the Stars	Henry Weingarten
Investor Skills Training	Rob Ronin
It's Your Option	Marvin Zelkin
Keeping a Cool Head in a Hot Market	Ruth B Roosevelt
Magic of Moving Averages	Scot Lowry
Market Beaters	Art Collins
Market Rap	Art Collins
Mind Over Markets:	J.DaltonOption
Strategies for Sophisticated Traders	Mitch Crask
Overcoming 7 Deadly Sins of Trading	Ruth B Roosevelt
Planetary Harmonics of Speculative Markets	Larry Pesavento
Point and Figure Charting: The Complete Guide	Carroll Aby
Point and Figure Commodity & Stock Trading Techniques .	K.Zieg
Precision Trdg with Stevenson Price & Time Targets	JR Stevenson
Private Thoughts from a Trader's DiaryPesavento & MacKay
Professional Commodity Trader.	Stanley Kroll
Profit Magic of Stock Transaction Timing	J.M. Hurst
Profitable Patterns for Stock Trading	Larry Pesavento

RSI: The Complete Guide	John Hayden
RSI: Logic, Signals and Time Frame Correlation	Walter Baeyens
Short Term Trading with Price Patterns	Michael Harris
Stock Patterns for Day Trading	Barry Rudd
Stock Trading Techniques Based on Price Patterns	Michael Harris
Taming Complexity	Dennis McNicholl
Technical Trading Systems for Commodities & Stocks ...	C. Patel
Technically Speaking	Chris Wilkinson
The Amazing Life of Jesse Livermore	Richard Smitten
The Crowd/Extraordinary Popular Delusions	Lebon & MacKay
Handbook of Global Securities Operations	Jerry O'Connell
The Opening Price Principle	Larry Pesavento
The Taylor Trading Technique	Douglas Taylor
The Trading Rule That Can Make You Rich	Edward Dobson
Trading Secrets of the Inner Circle	Andrew Goodwin
Understanding E-Minis	Bauer & Williams
Understanding Fibonacci Numbers	Edward Dobson
Understanding Gaps	Scott Andrews
Understanding MACD	Gerald Appel & Edward Dobson
Understanding RSI	Edward Dobson & Roger Reimer
Understanding Spreads	Edward Dobson & Roger Reimer
Wall St. Ventures and Adventures thru 40 Years	Richard Wyckoff
When Supertraders Meet Kryptonite	Art Collins
Winning Edge 4	Adrienne Toghraie
Winning Market Systems: 83 Ways to Beat the Mkt	Gerald Appel

Now Available Through Traders Press, Inc.®

e-Books Available for Immediate Download

Some no longer in print and some NEW

Visit us at www.traderspress.com for a complete listing

Great news from Traders Press



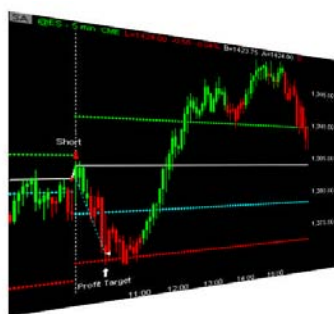
Traders press, publisher and distributor of educational materials for investors and traders, has published a 40 page E-Book by trading coach Ruth Roosevelt, keeping a Cool Head in a Hot Market. We are reserving a FREE COPY just for you! Just go to the following link to register for and print out your own copy:
<http://www.traderspress.com/3800.php>

Learn how to keep a cool head in a hot market. When a “hot” market develops, you have an exceptional opportunity to make extraordinary profits. However; this can be an emotionally draining environment in which it is easy to make mistakes in judgment. You could not only lose the opportunity to profit, you could potentially destroy your trading account! It is vitally important to keep your wits about you when you become involved in such a situation. Veteran trading coach and trader Ruth Roosevelt applies her usual no-nonsense style in order to show you how to maximize the benefits and avoid the land mines encountered in a :hot market”

GET YOUR FREE COPY TODAY!



*Looking for an edge trading the opening gap?
Need help creating your own gap strategy?
Want to join a dedicated community of “gappers”?*



Free Benefits:

- Daily Gap Map with historical win rates
- Daily Seasonality Guide
- Daily Gap Wrap discussion

Member Benefits:

- Daily gap setups and probabilities based on 10 years of S&P 500 futures data
- Gap Fact Database packed with tips for trading gaps
- Live Trading Room & Discussion Forum

Get an edge.

Trade the zones.

Master the gap.

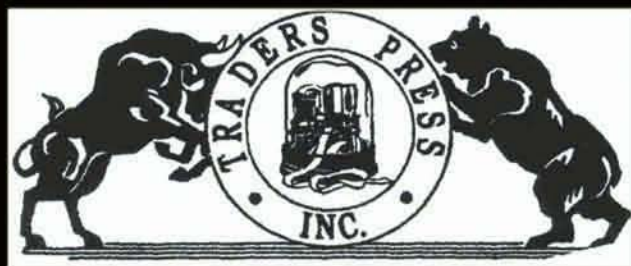
www.MasterTheGap.com



Scott Andrews is president of Master The Gap, Inc., an online service that uses an innovative “zone” approach and historical probabilities to help traders more profitably play opening gaps. Demand for Mr. Andrews’ work from other traders led to the establishment of MasterTheGap.com.

In 1995, he co-founded SciQuest, Inc., to streamline the procurement process for healthcare and academic organizations. As CEO, Mr. Andrews took the company public in 1999. Fueled by his firsthand experiences with Wall Street, he became a student of the markets.

Attracted to the compelling bias and simplicity of opening gaps, and through exhaustive research, Mr. Andrews ultimately created a novel pattern recognition strategy. He has spoken at many financial and internet conferences and is a decorated aviator of the first Gulf War. Mr. Andrews earned his MBA from the University of North Carolina and graduated from the United States Military Academy (West Point).



**PO Box 6206
Greenville, SC 29606
800-927-8222 - Fax 864-298-0221
<http://www.traderspress.com>**

UNDERSTANDING GAPS

ISBN-13: 978-1-934674-01-7
ISBN-10: 1-934674-01-X

