

The Five Key Principles Behind the Andrews Median Line: A True Leading Indicator and Trend Trading Tool

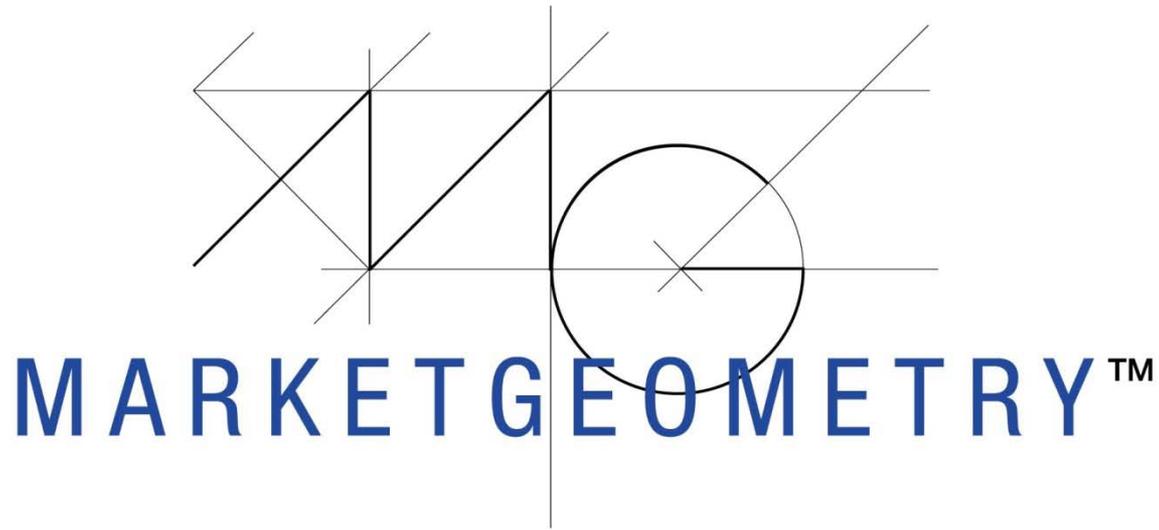


Timothy Morge, CTA and President
Blackthorne Capital, Inc.

Internet Presentation Sponsored by Interactive Brokers July 12, 2012

www.marketgeometry.com

www.medianline.com



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Market Volatility

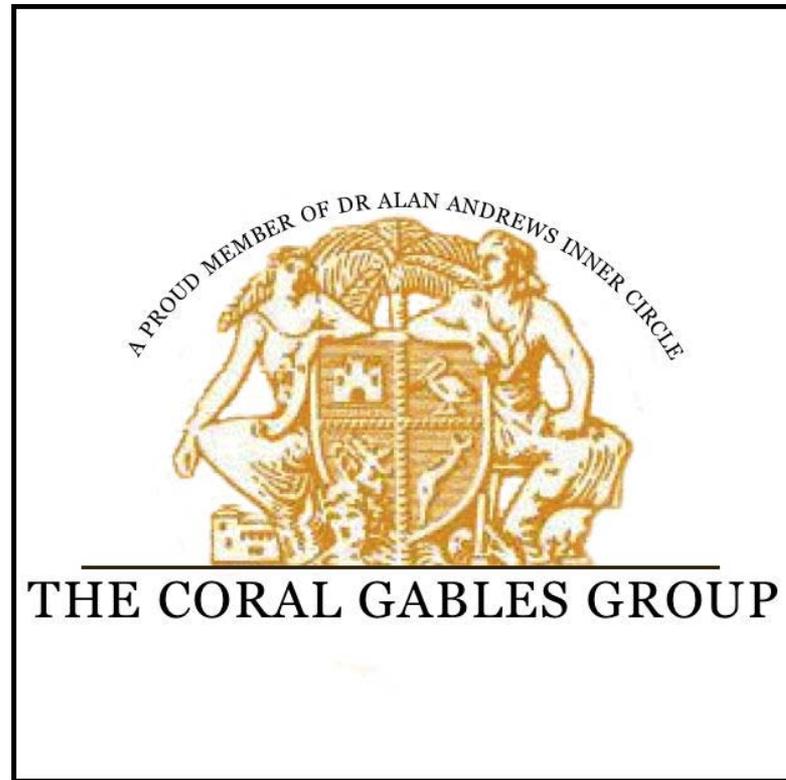
In volatile market conditions, substantial losses may occur.

In volatile market conditions, orders may not be filled as placed.

Leverage

The leveraged nature of FX trading and Futures trading means that any market movement will have an equally proportional effect on your deposited funds. This may work against you as well as for you. The possibility exists that you could sustain a total loss of initial margin funds and be required to deposit additional funds to maintain your position. If you fail to meet any margin call within the time prescribed, your position will be liquidated and you will be responsible for any resulting losses.

This webcast is dedicated one of my earliest mentors, Dr. Alan Andrews, a Newtonian Physicist that developed Action/Reaction Lines and the Median Line in the mid-1920's.

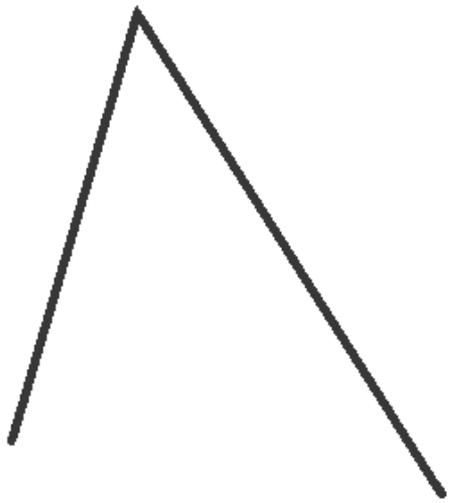


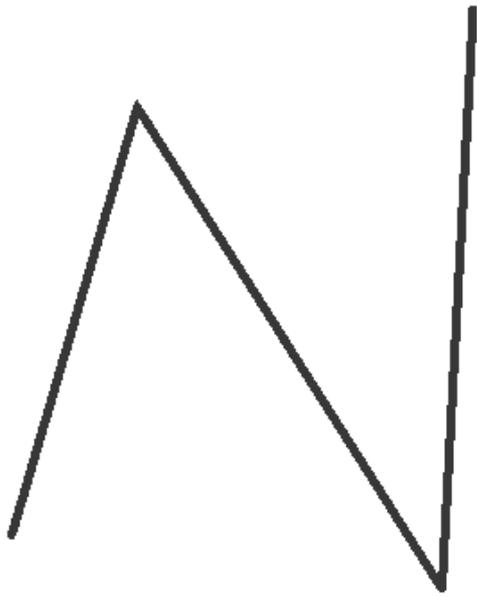
And to the Coral Gables Group, his Inner Circle. There are only eight left, and I am proud to be one, carrying forward his work.

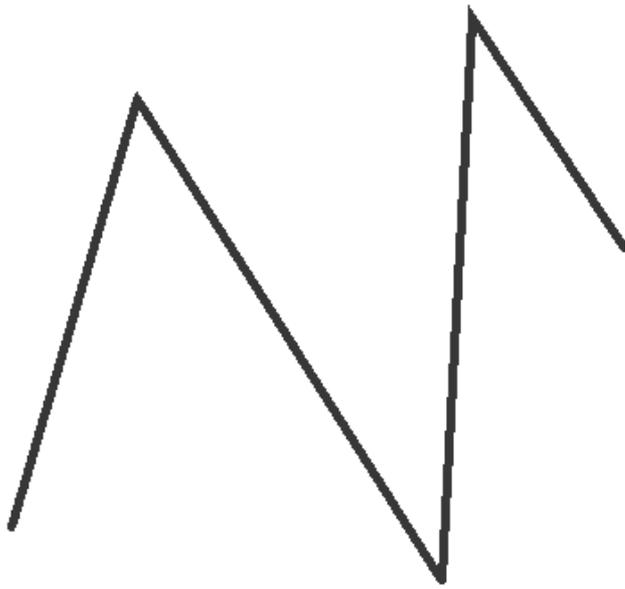
Price Fluctuates!

Let's Investigate a 240 Minute Price Swing Chart From Crude Oil Futures Using Two Technical Analysis Tools













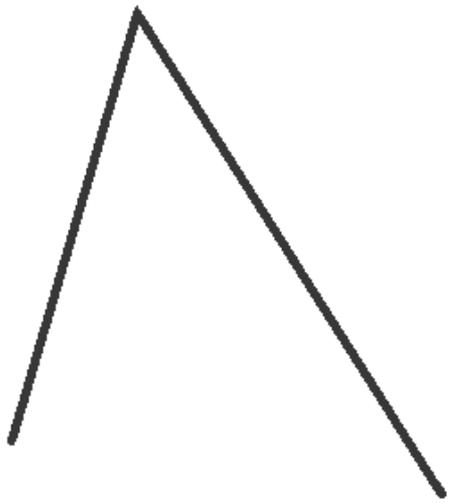


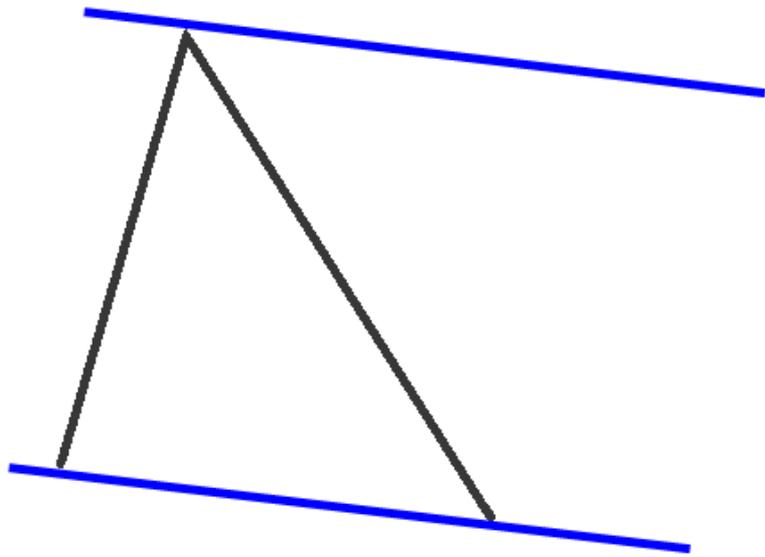


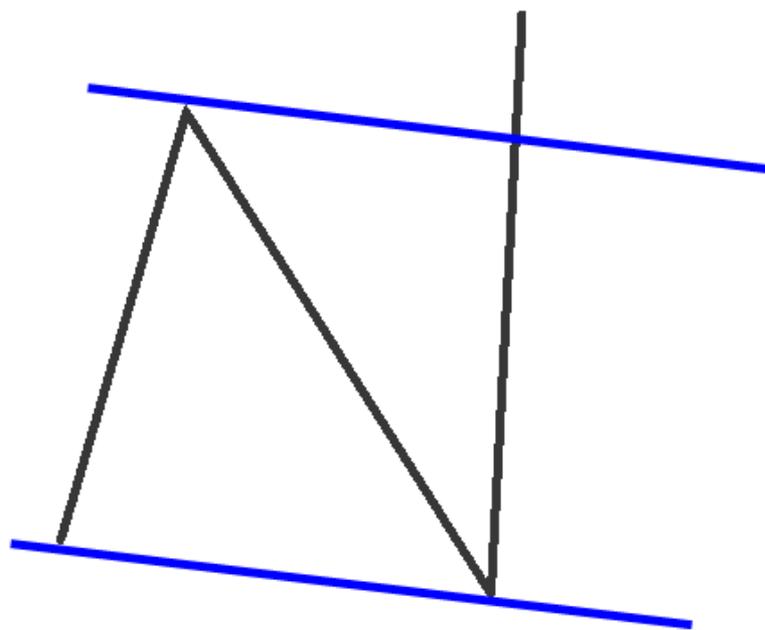
Looking for Frequency

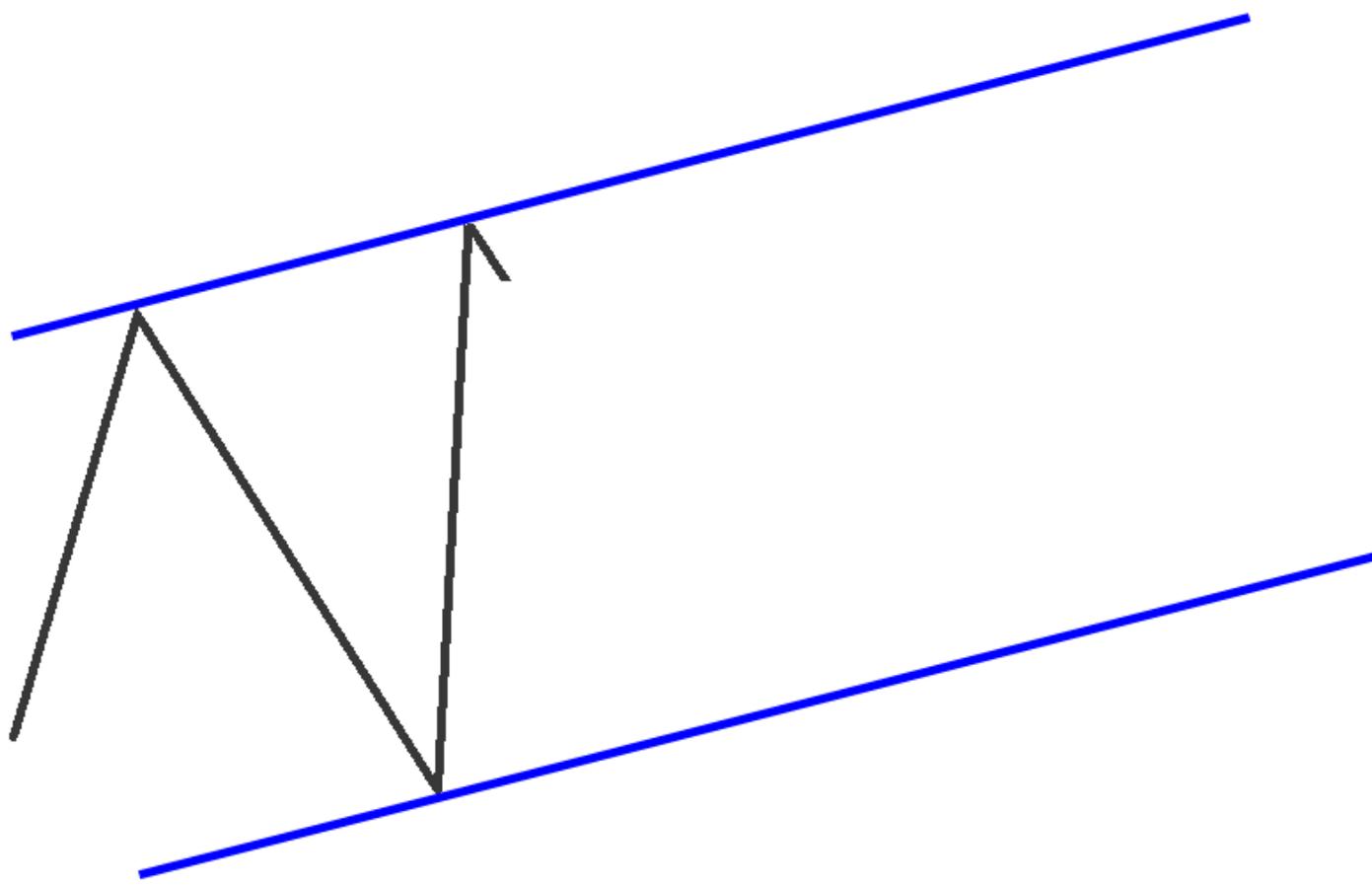
Using a Channel to Define the Probable Path of Price

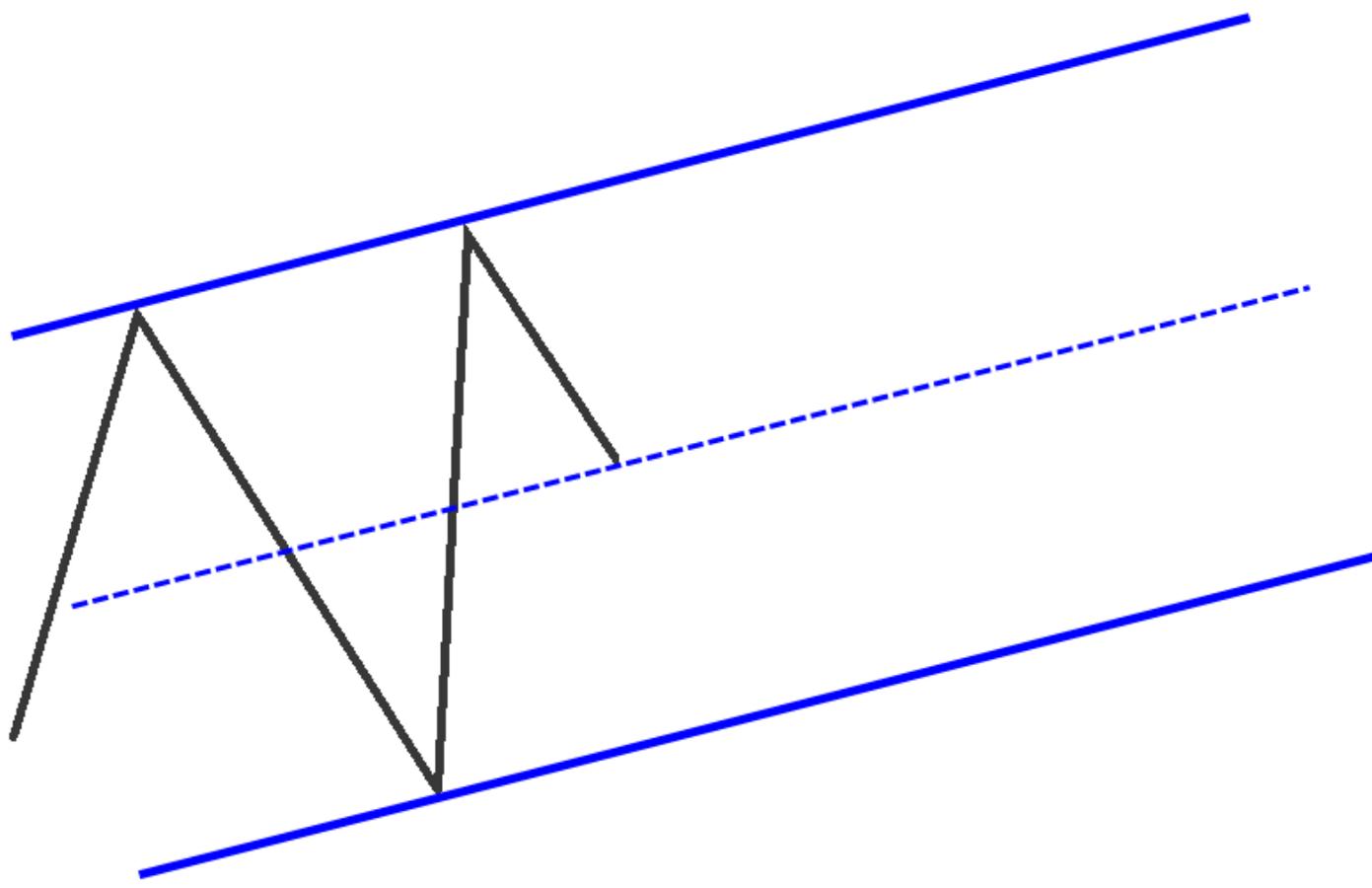


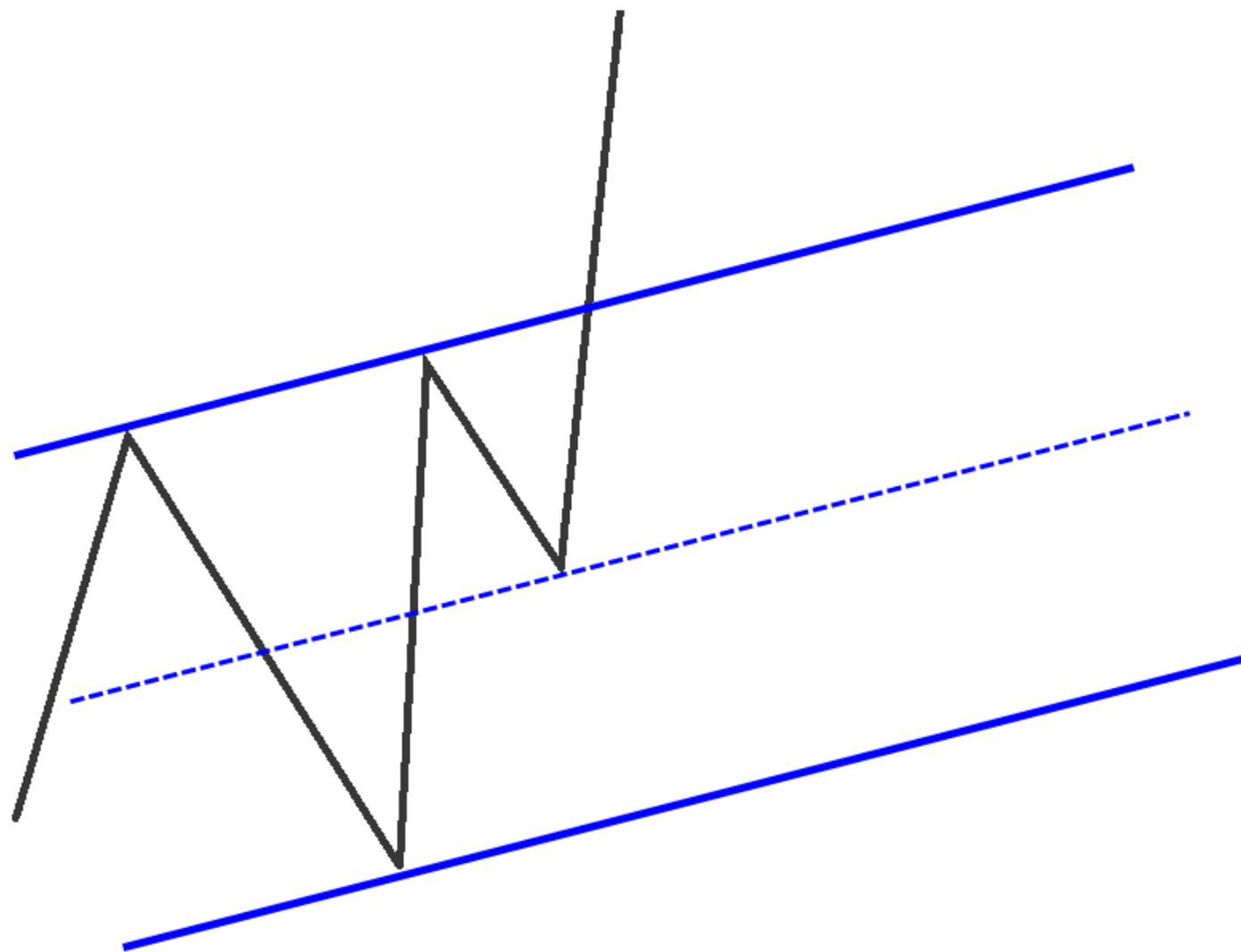


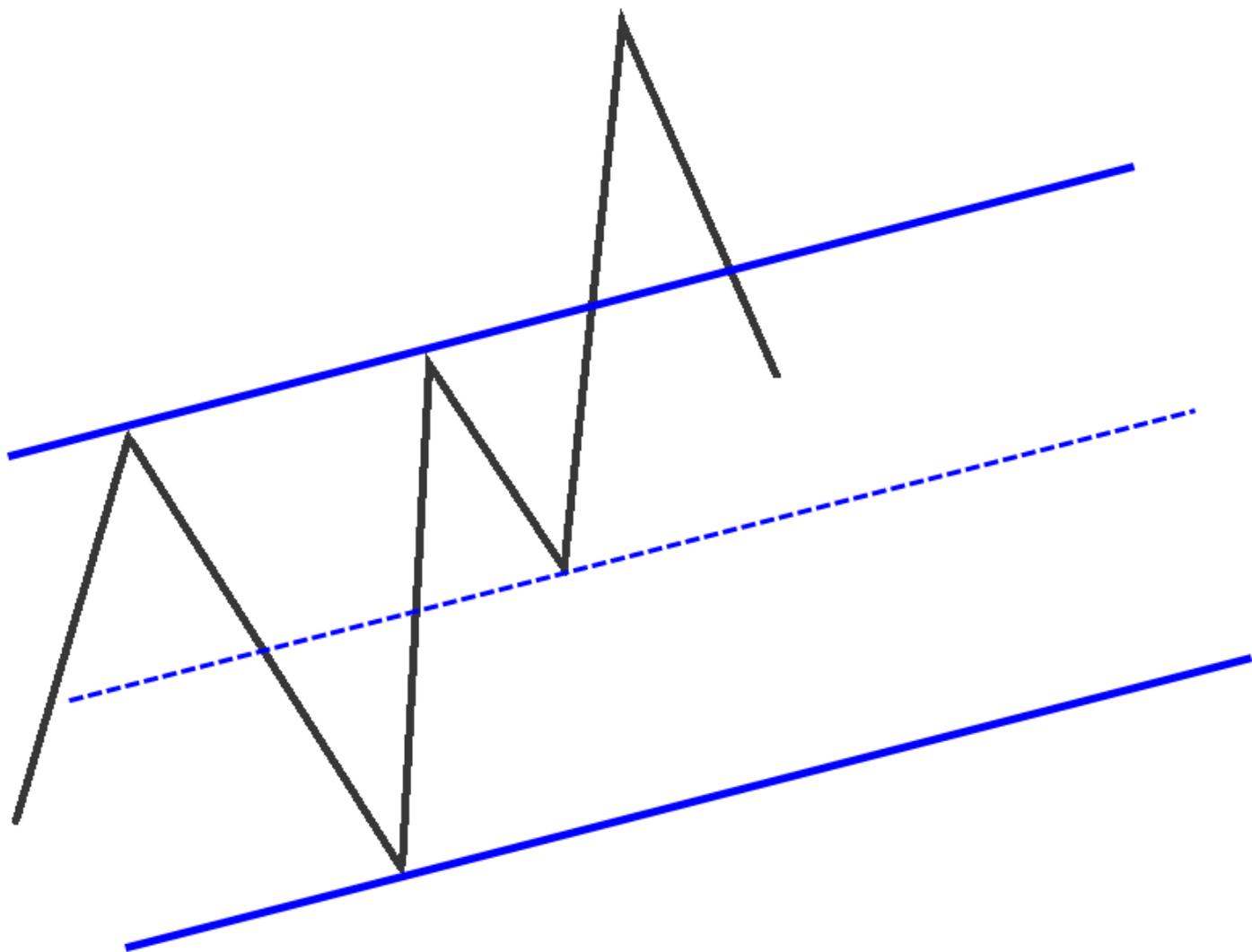


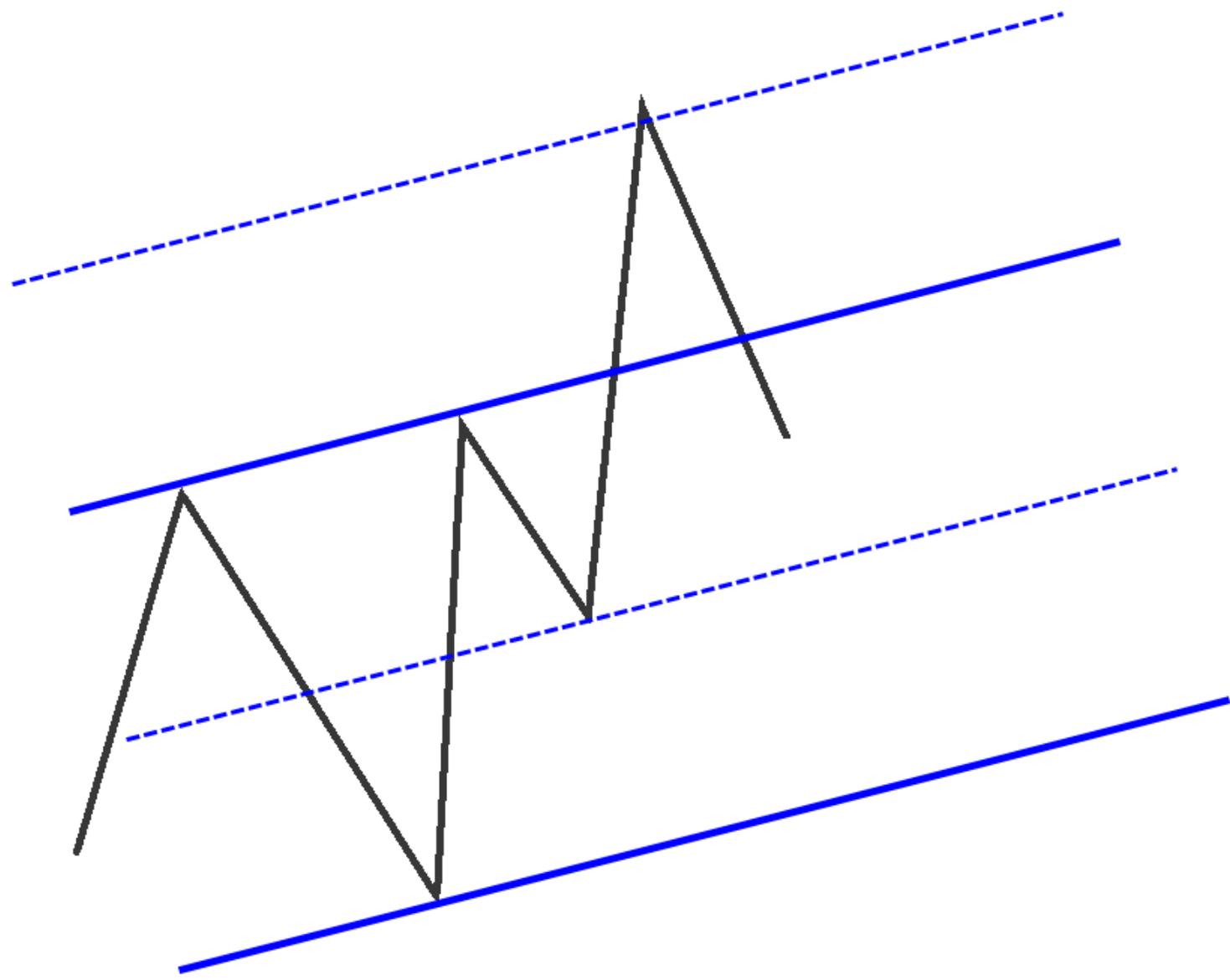


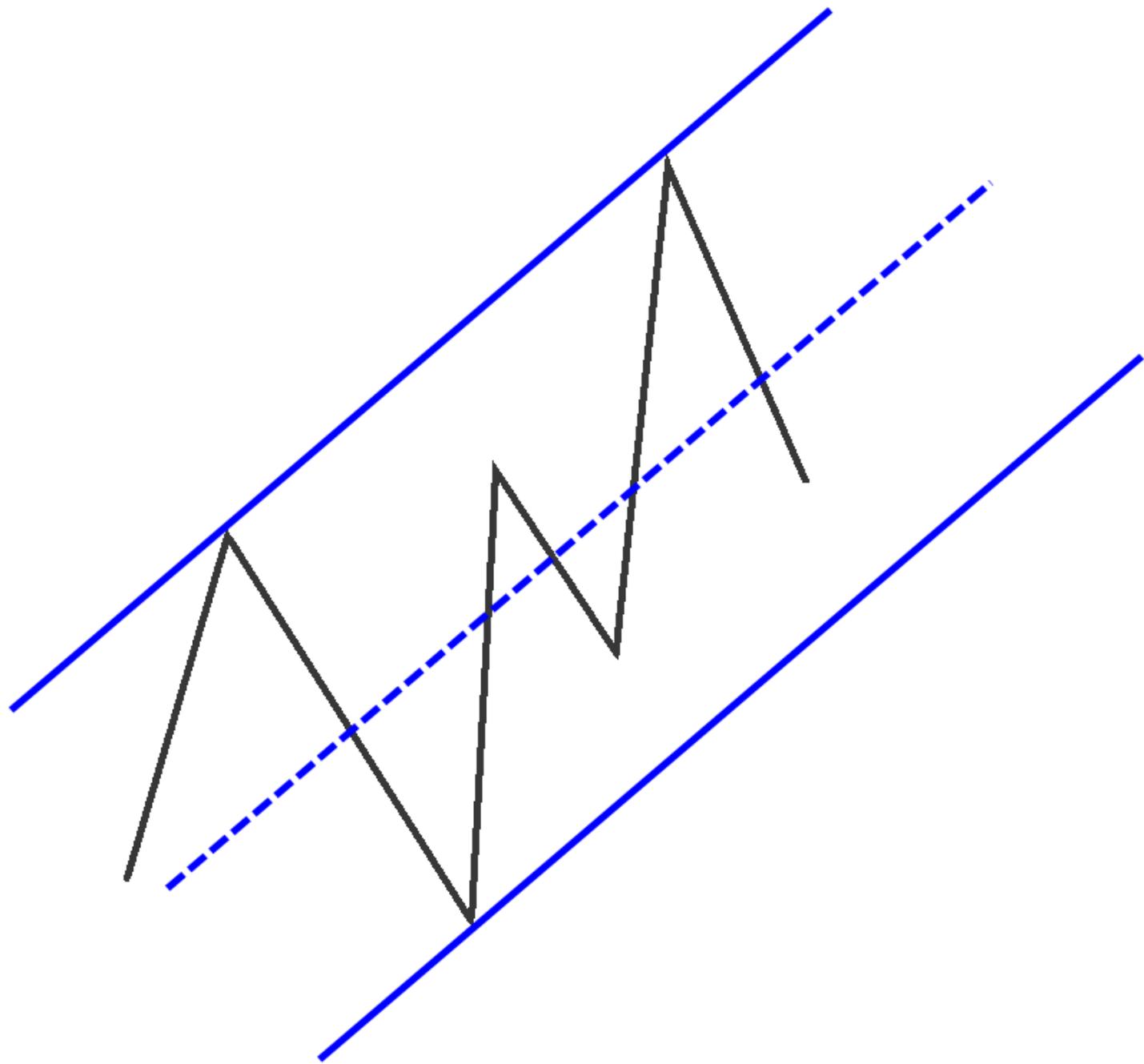


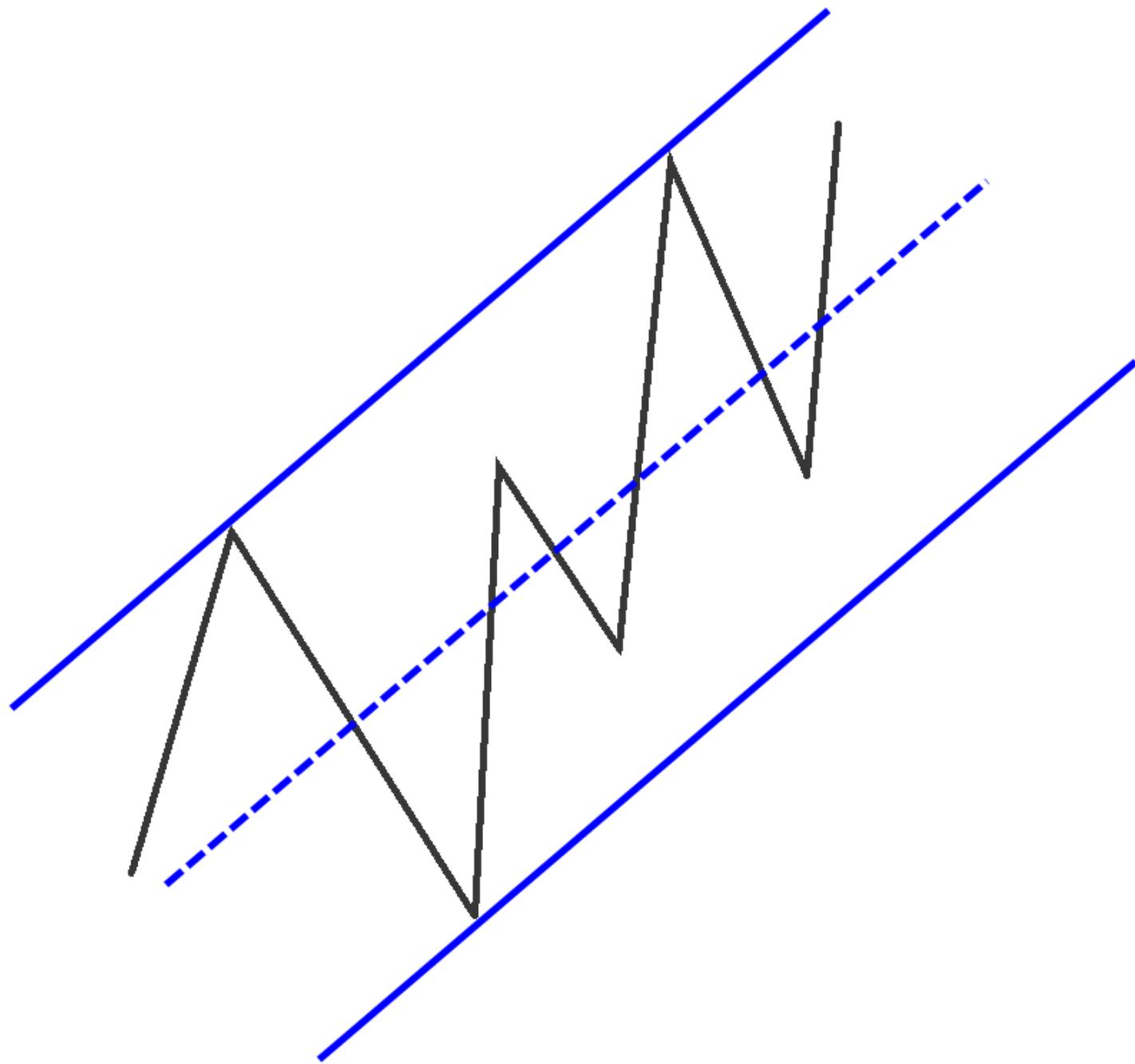


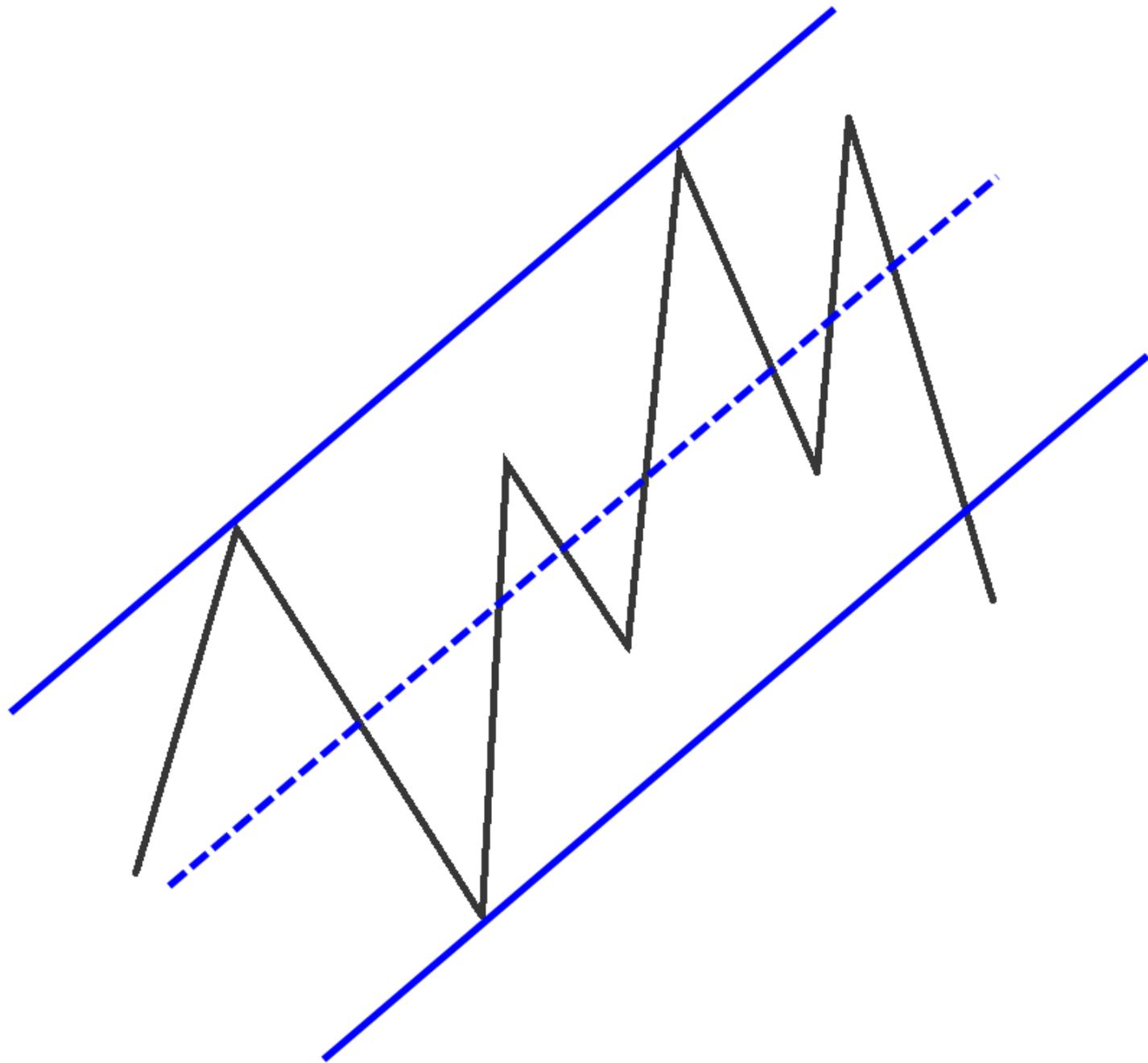








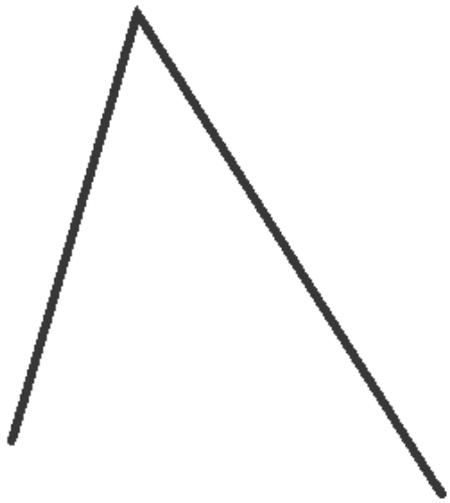


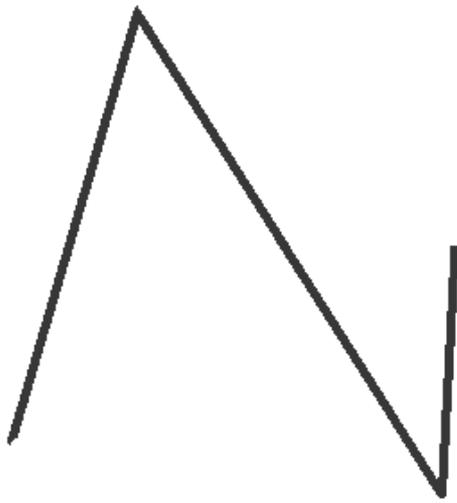


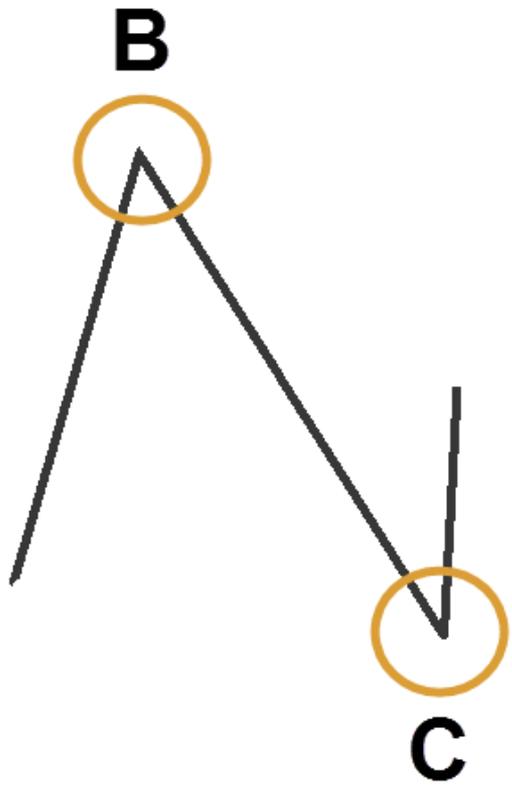
Looking for Frequency Part II

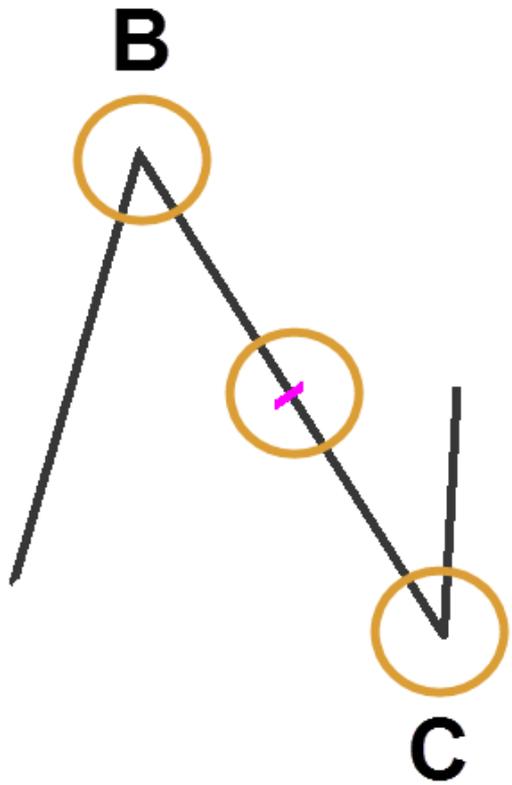
Using Median Lines to Define the Probable Path of Price

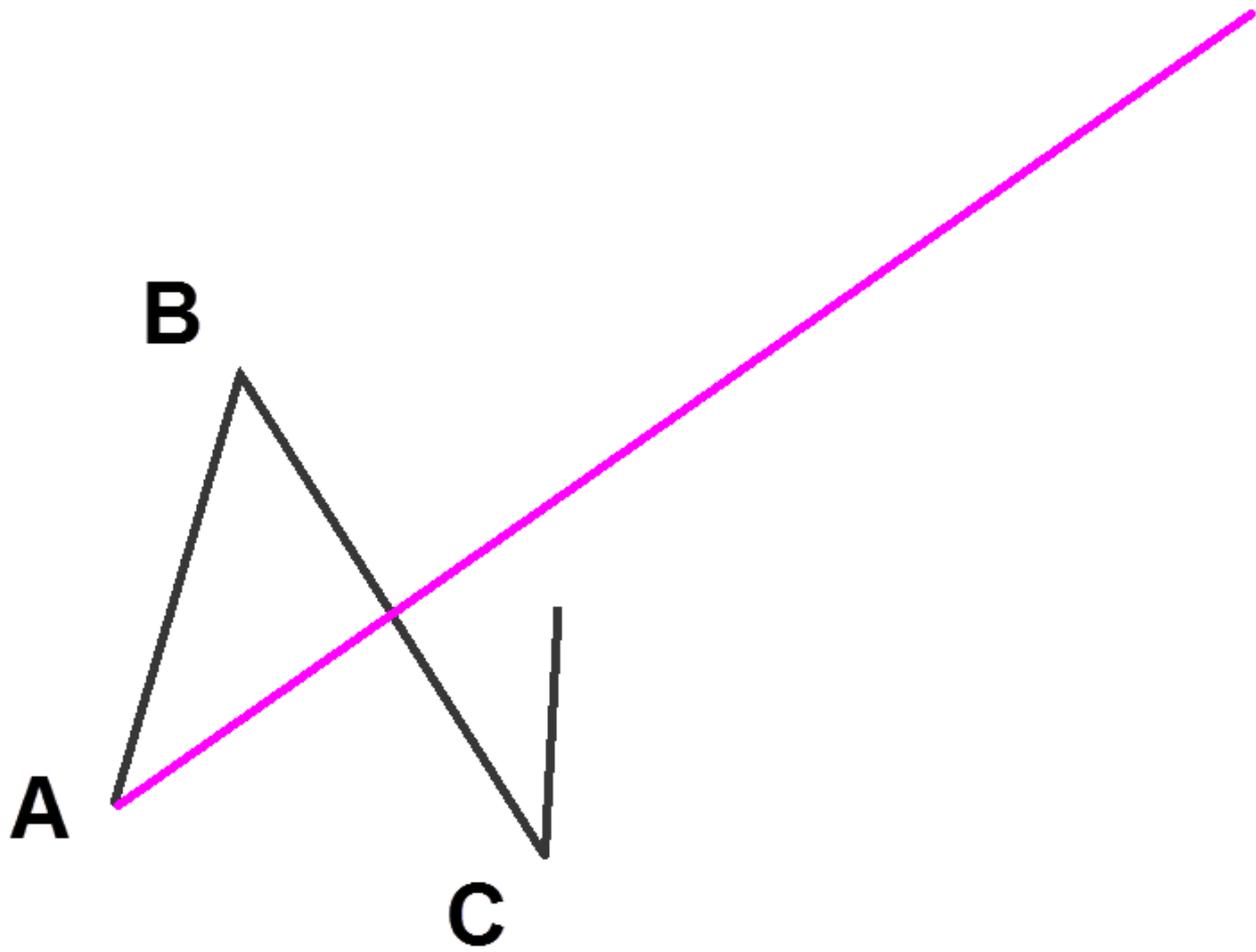


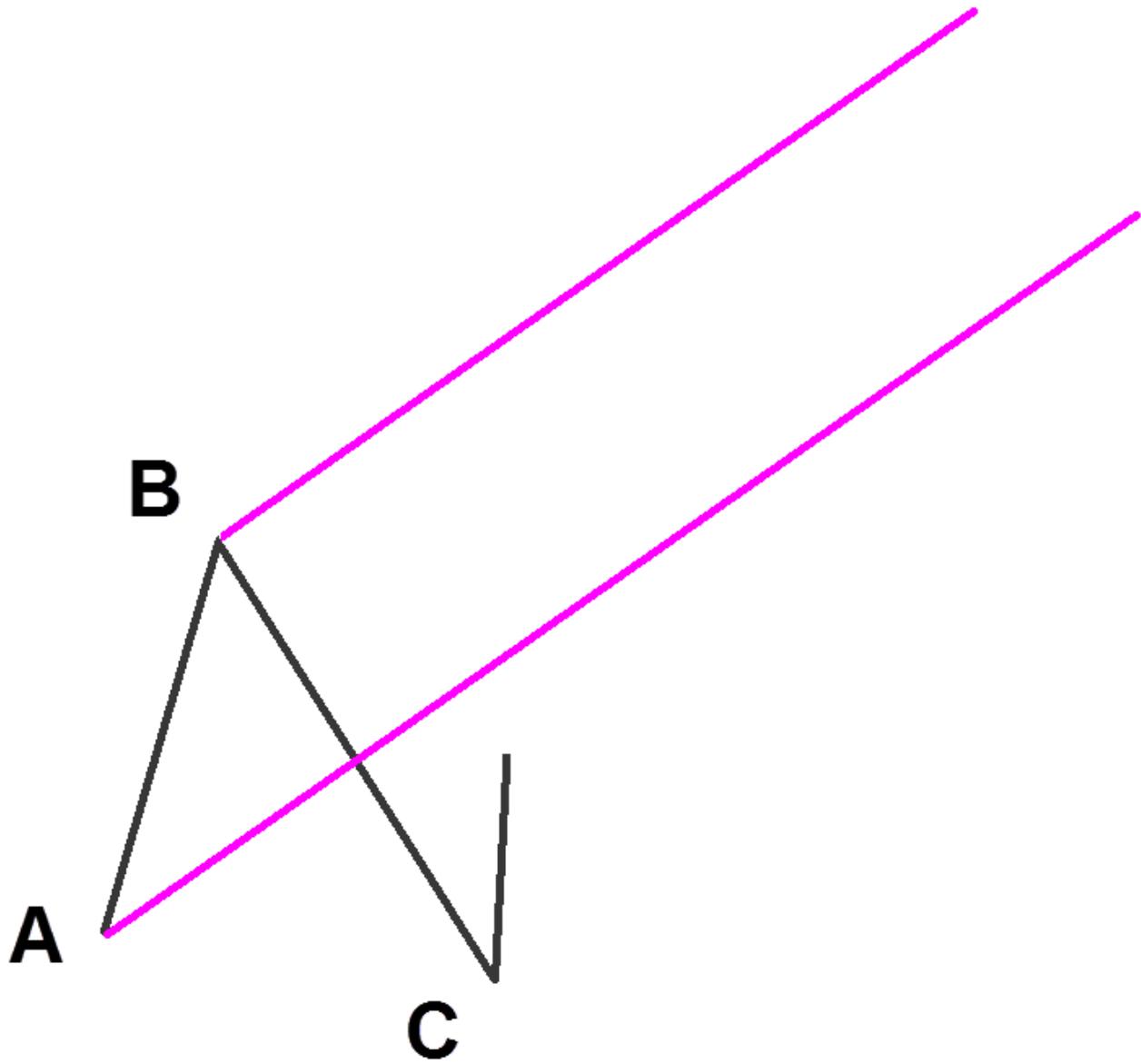


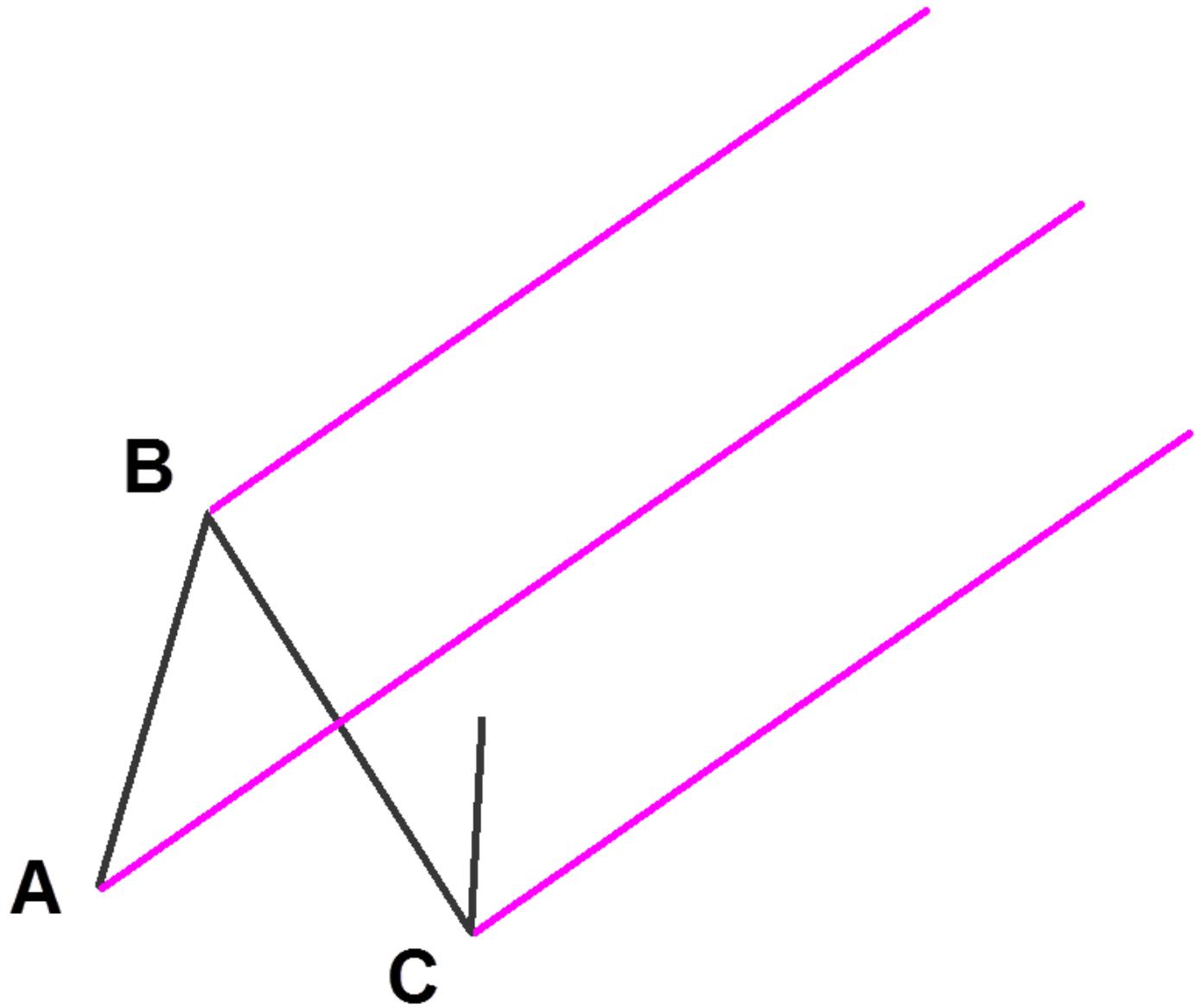


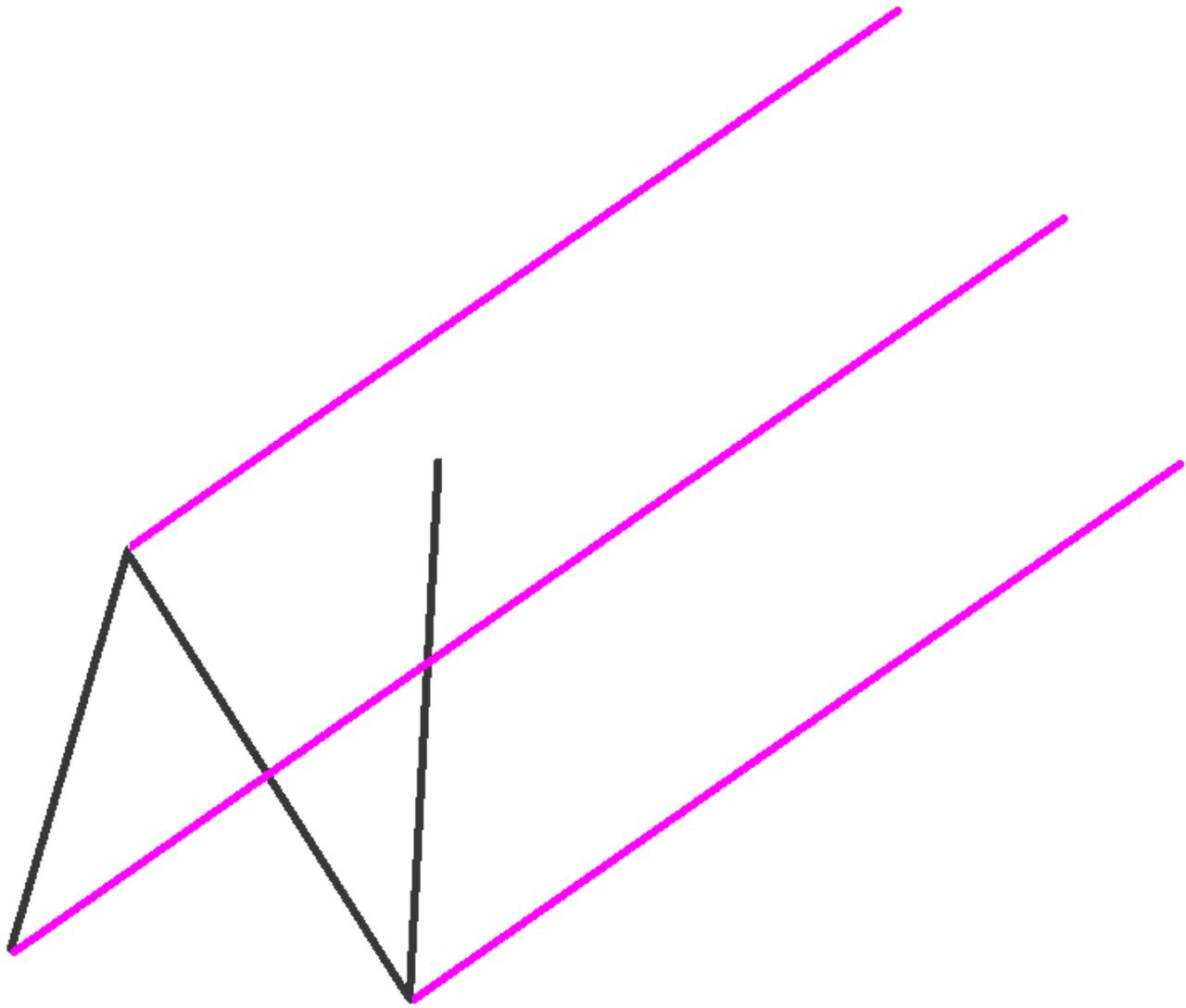




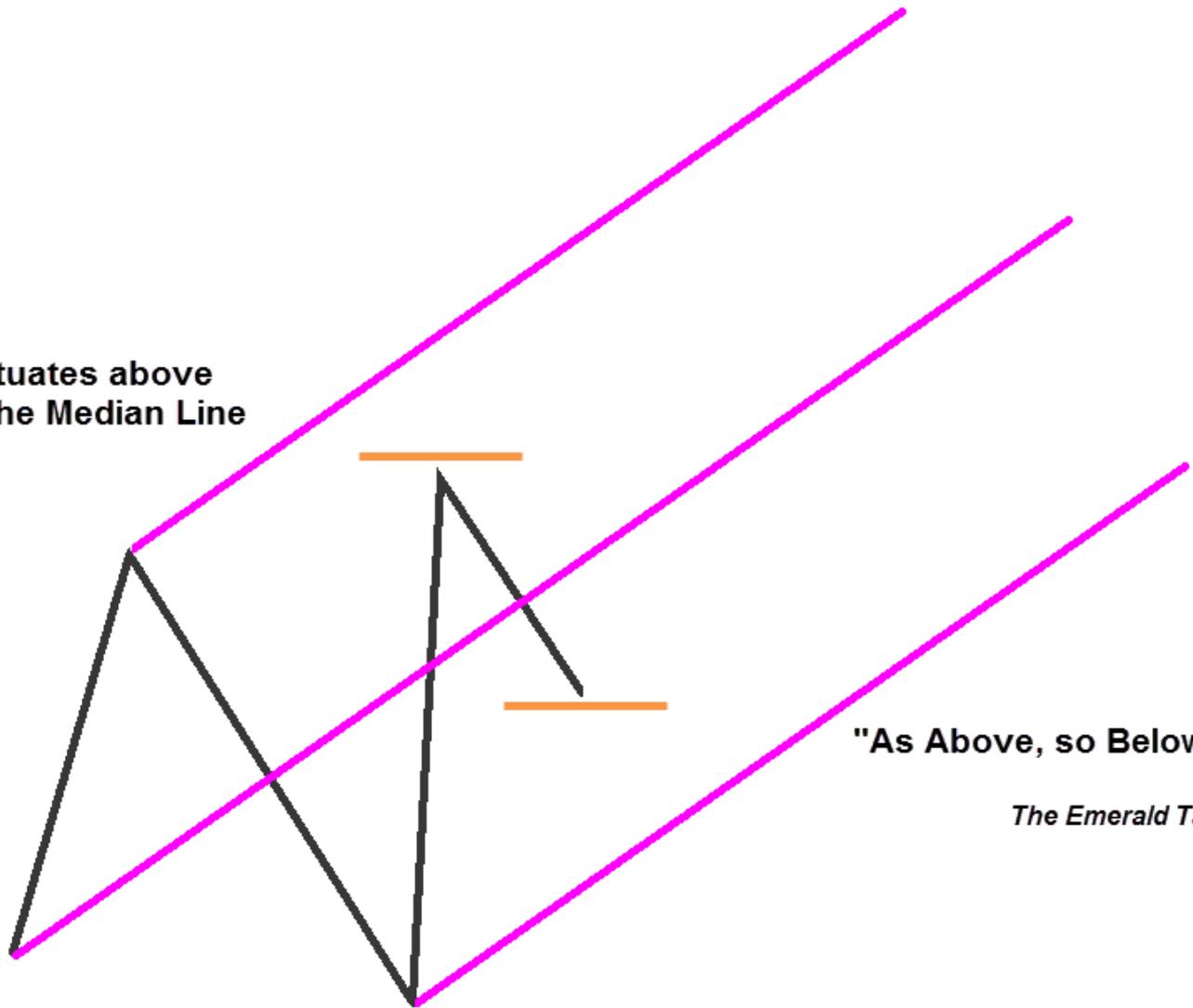








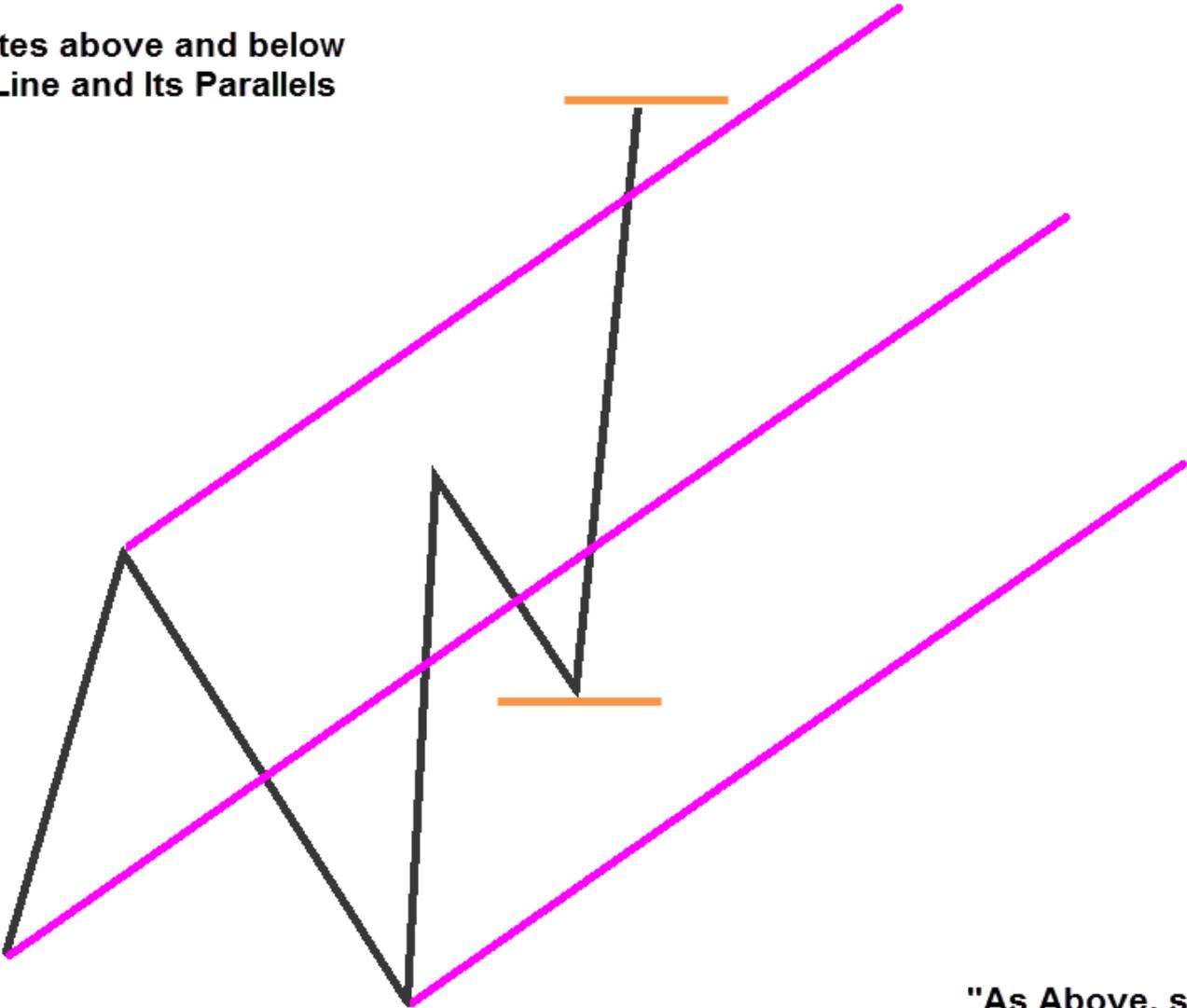
Price fluctuates above
and below the Median Line



"As Above, so Below..."

The Emerald Tablet

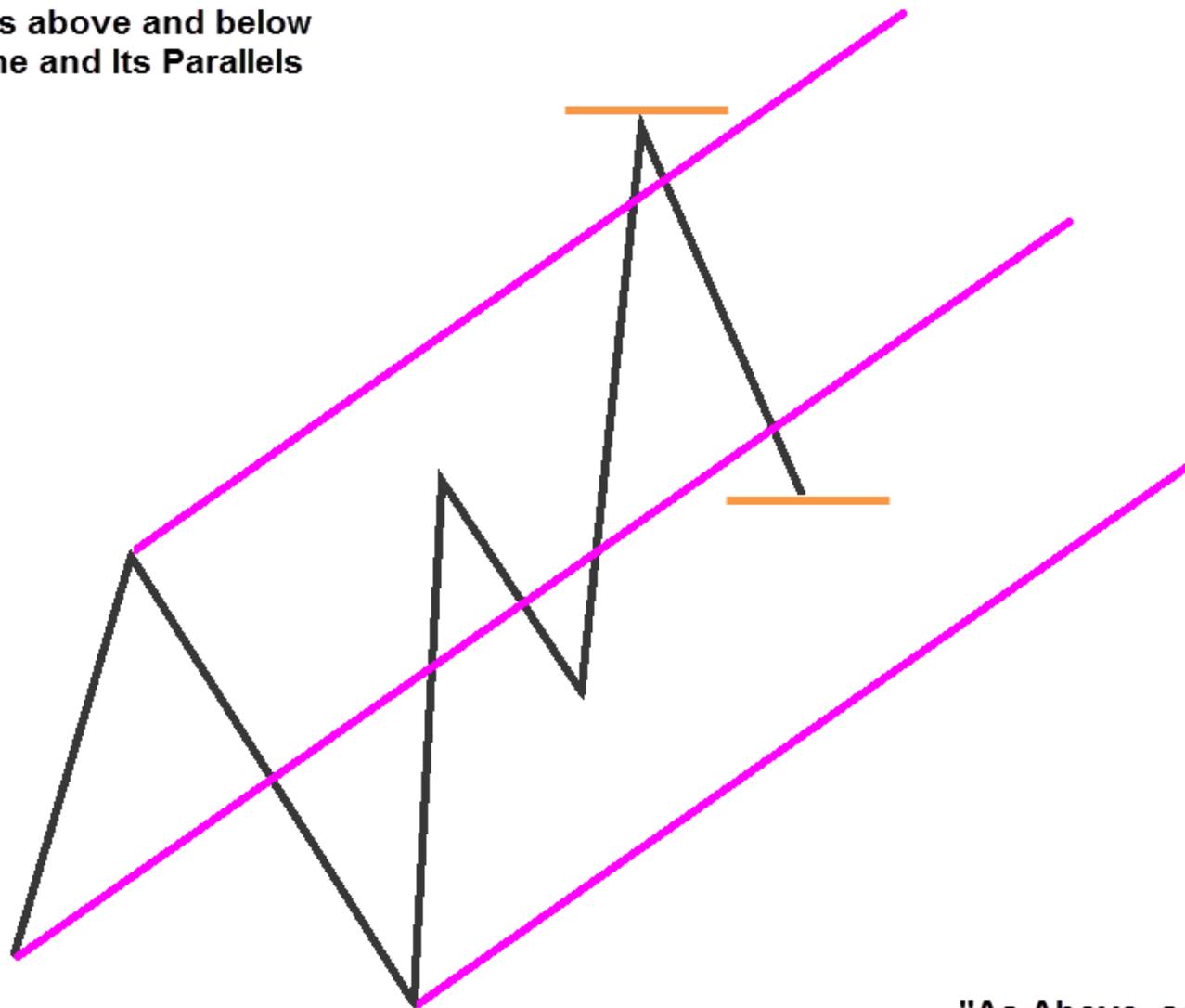
**Price fluctuates above and below
the Median Line and Its Parallels**



"As Above, so Below..."

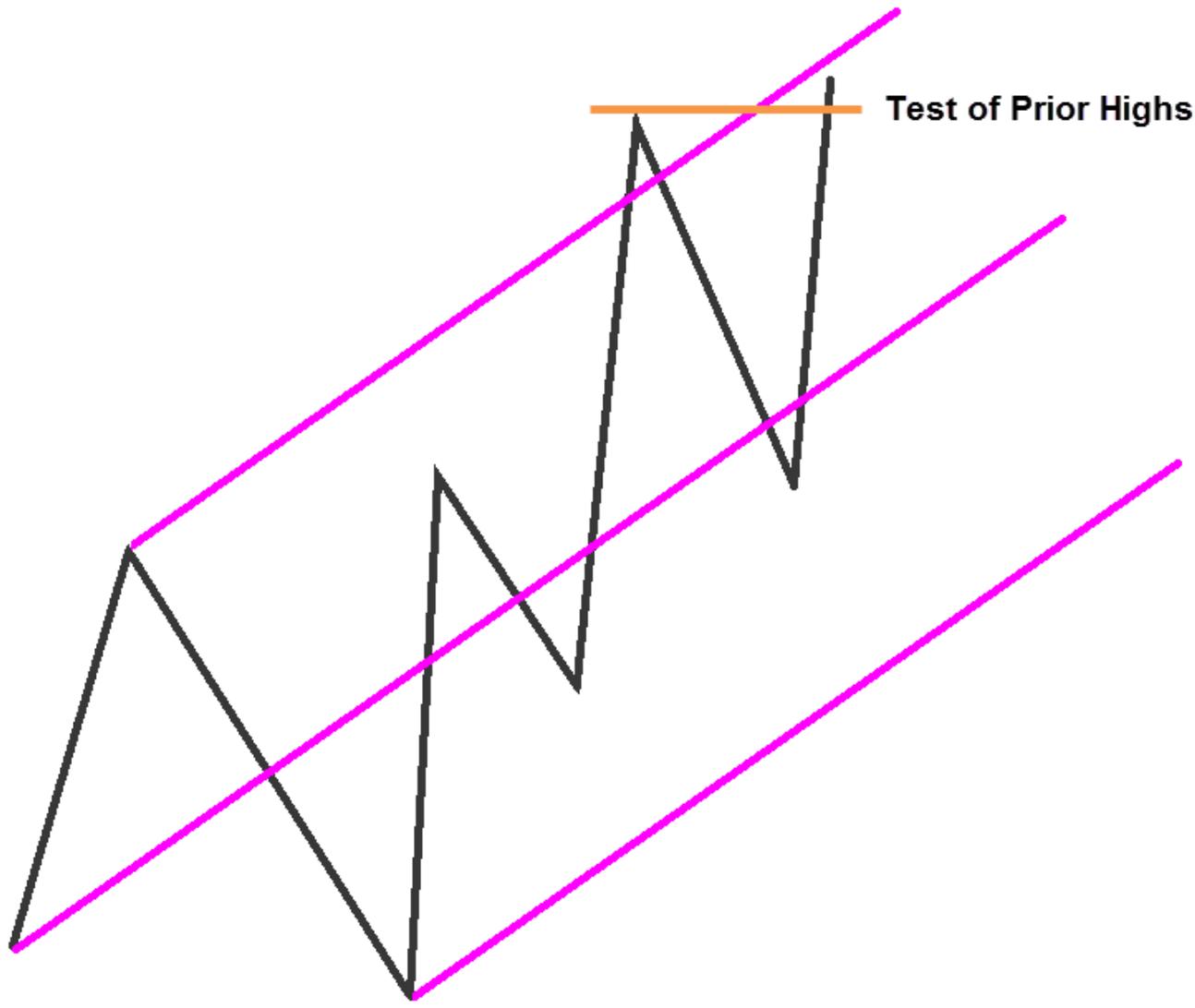
The Emerald Tablet

Price fluctuates above and below
the Median Line and Its Parallels



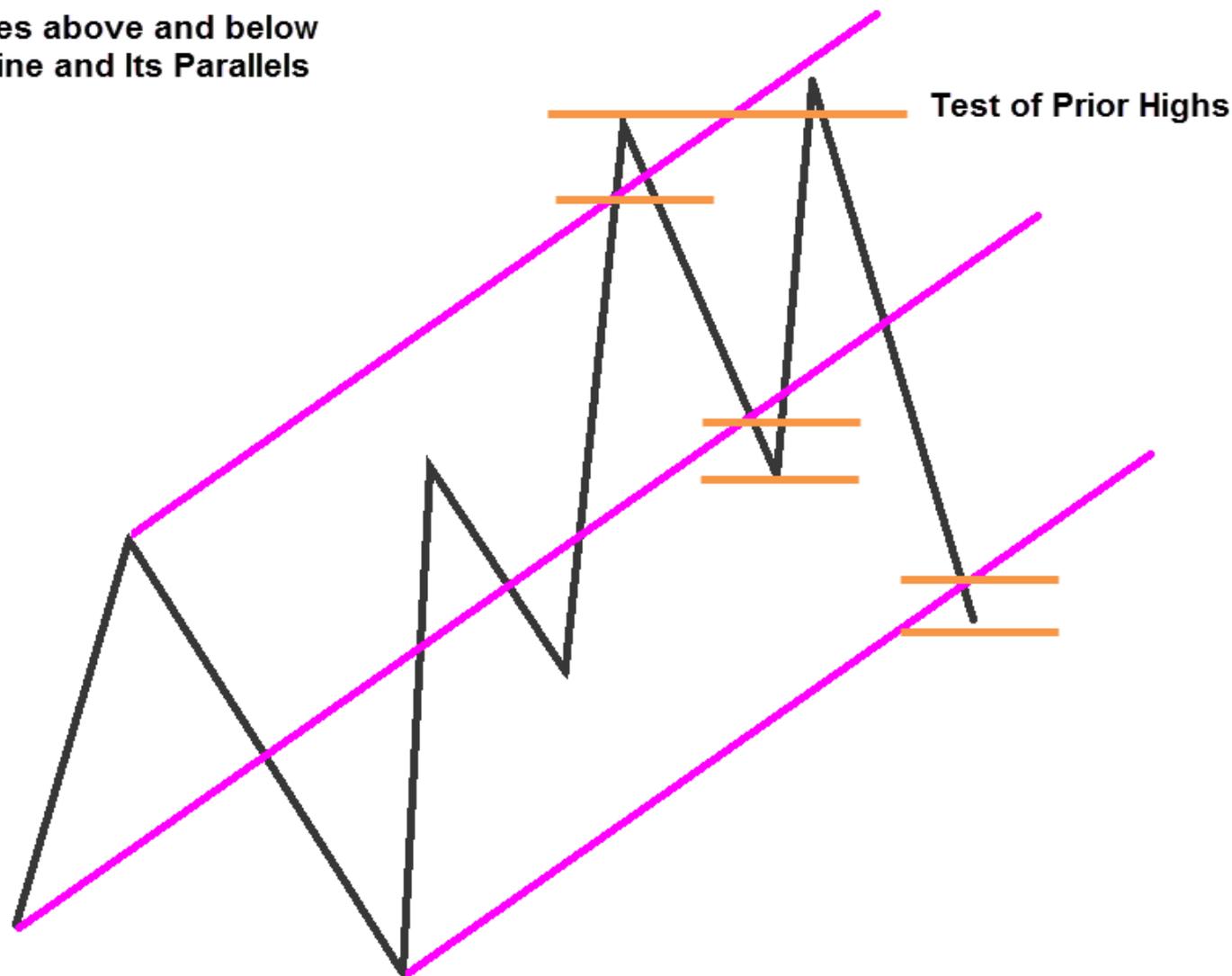
"As Above, so Below..."

The Emerald Tablet



Test of Prior Highs

**Price fluctuates above and below
the Median Line and Its Parallels**



Test of Prior Highs

"As Above, so Below..."

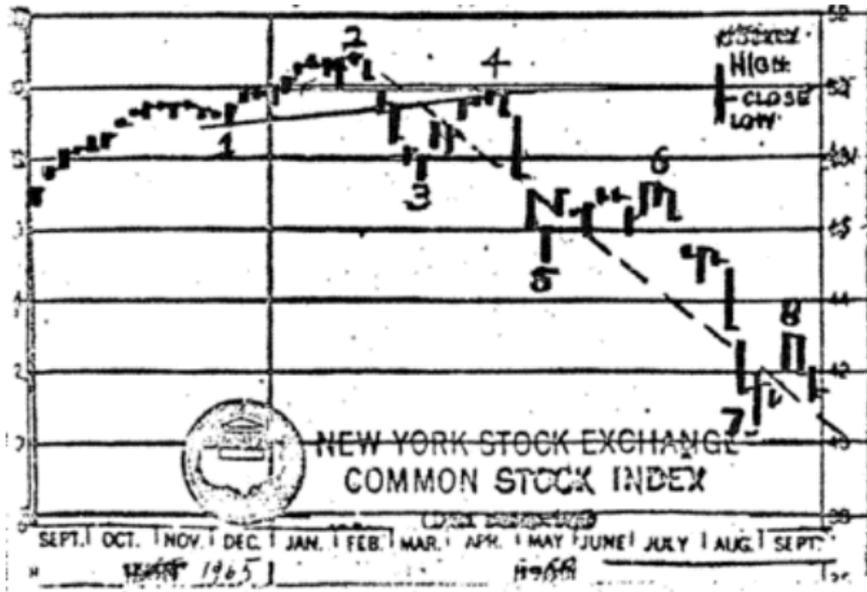
The Emerald Tablet

Median Line Theory

**Let's Look at Daily Charts of Crude Oil Futures and Identify
The Five Key Principles Behind the Andrews Median Line**

Dr. Andrews gave us Five Key Principles to help us see the Probable Path of Price

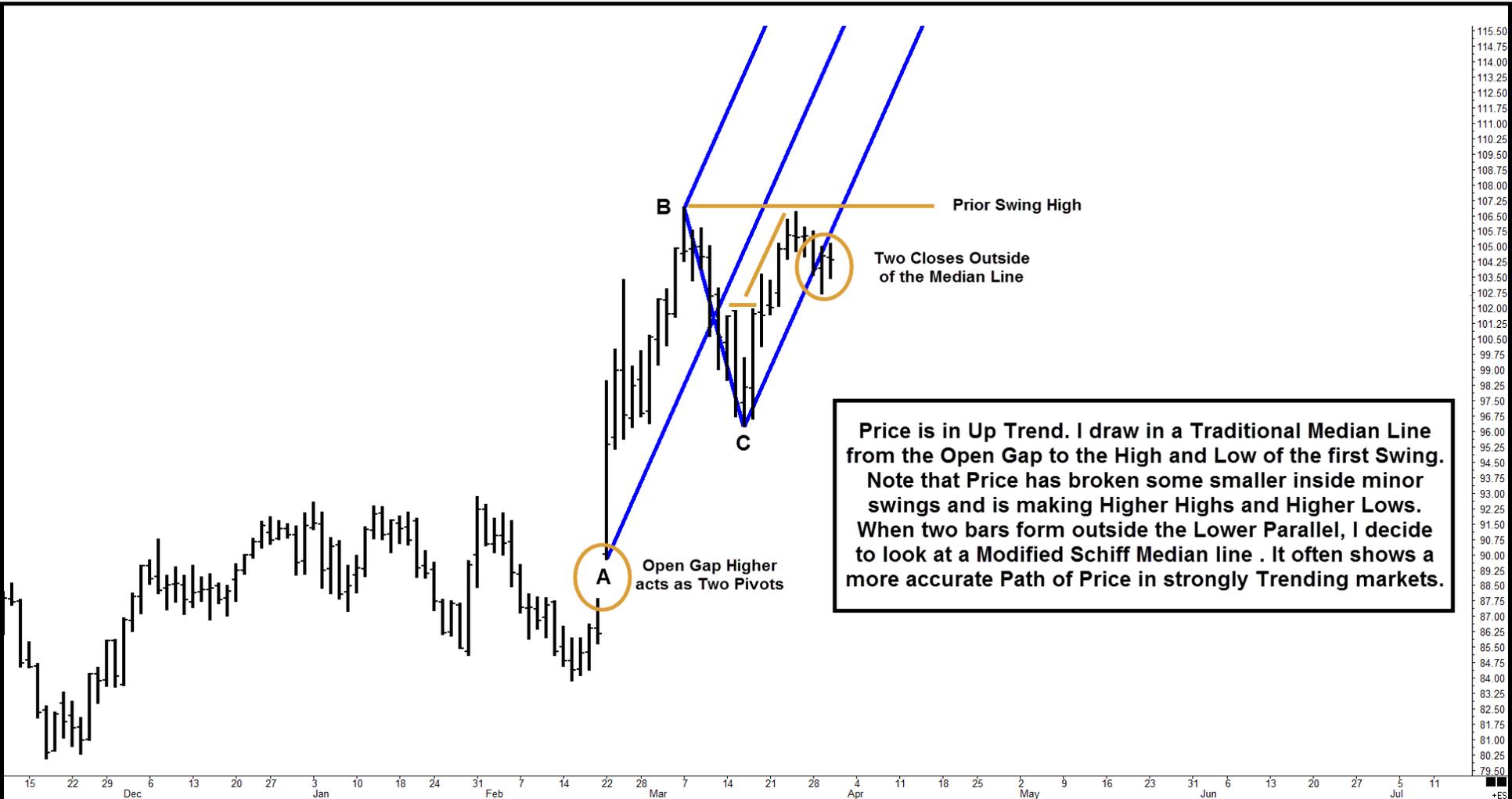
Alan H Andrews,



copyright 1966

There is a high probability that:

1. Prices will reach the latest ML
2. Prices will either reverse on meeting the ML or gap through it
3. When prices pass through the ML, they will pull back to it
4. When prices reverse before reaching the ML, leaving a "space", they will move more in the opposite direction than when prices were rising toward the ML.
5. Prices reverse at any ML or extension of a prior ML.

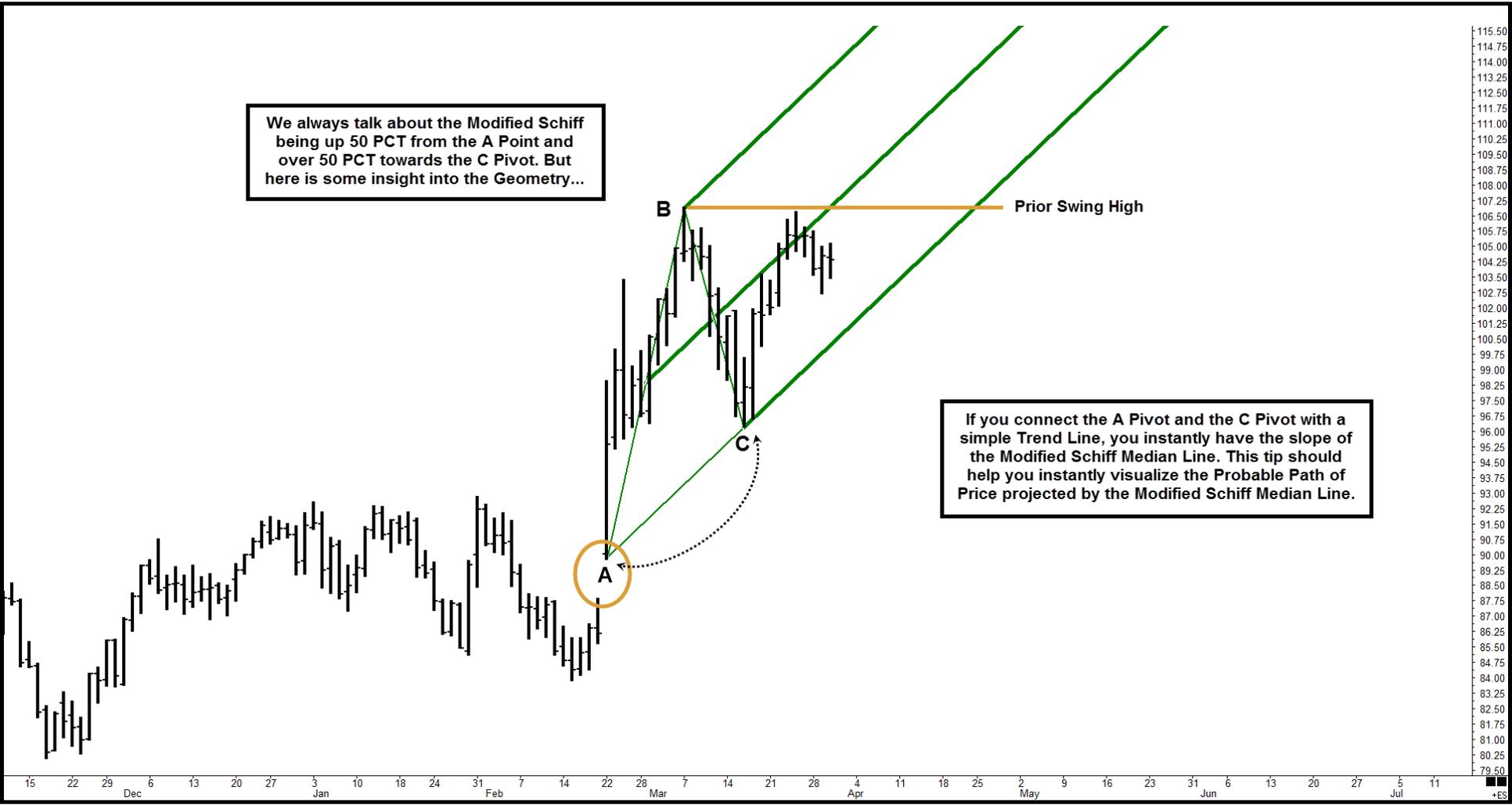


Price is in Up Trend. I draw in a Traditional Median Line from the Open Gap to the High and Low of the first Swing. Note that Price has broken some smaller inside minor swings and is making Higher Highs and Higher Lows. When two bars form outside the Lower Parallel, I decide to look at a Modified Schiff Median line. It often shows a more accurate Path of Price in strongly Trending markets.

115.50
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81.00
80.25
79.50

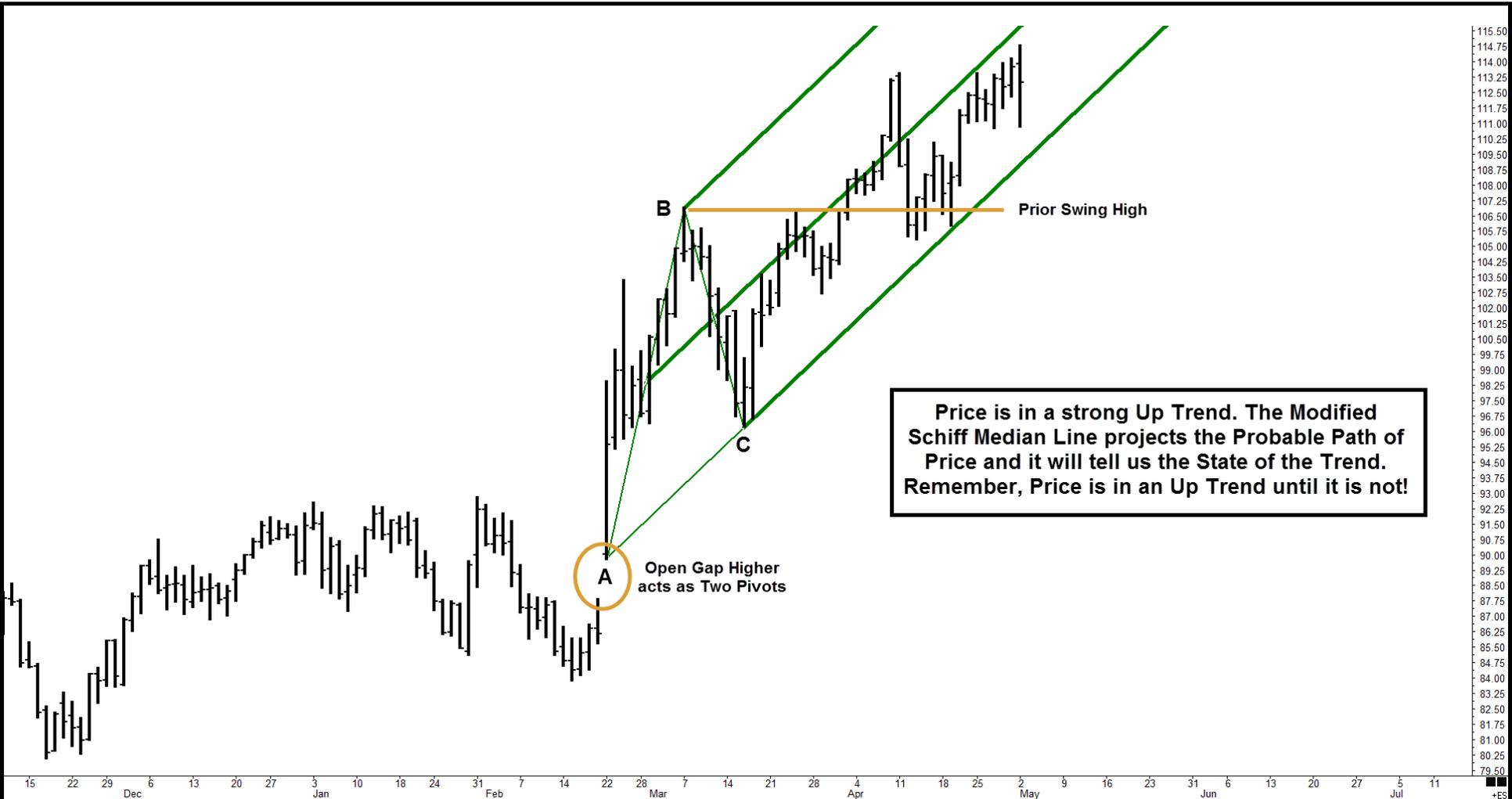
15 22 29 Dec 6 13 20 27 3 Jan 10 18 24 31 Feb 7 14 22 Mar 28 7 14 21 Apr 4 11 18 25 2 May 9 16 23 31 Jun 6 13 20 27 5 Jul 11

We always talk about the Modified Schiff being up 50 PCT from the A Point and over 50 PCT towards the C Pivot. But here is some insight into the Geometry...



If you connect the A Pivot and the C Pivot with a simple Trend Line, you instantly have the slope of the Modified Schiff Median Line. This tip should help you instantly visualize the Probable Path of Price projected by the Modified Schiff Median Line.

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89.25
88.50
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87.00
86.25
85.50
84.75
84.00
83.25
82.50
81.75
81.00
80.25
79.50
■
+ES





A Open Gap Higher acts as Two Pivots

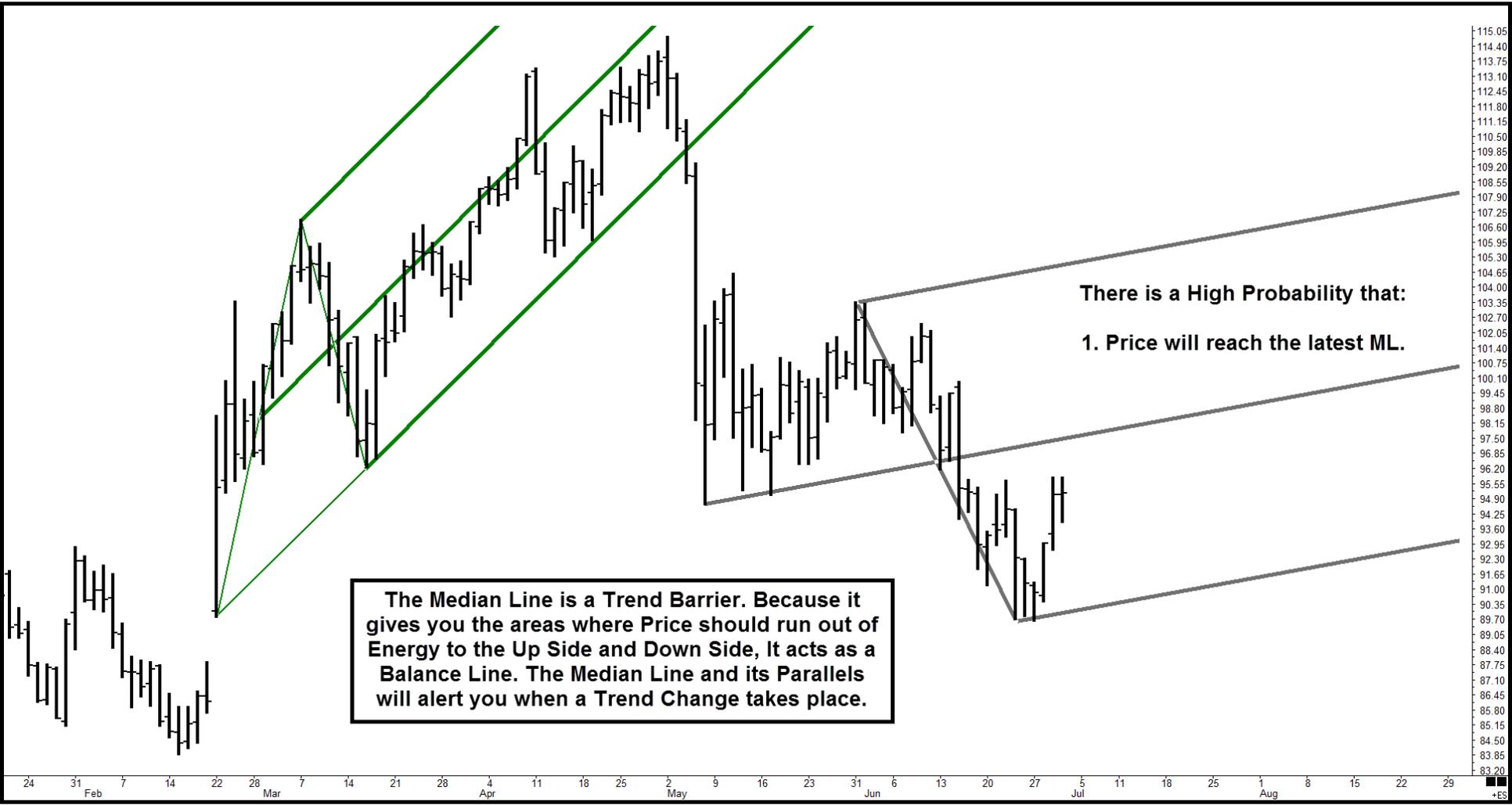
B Prior Swing High

C

Price is in a strong Up Trend. The Modified Schiff Median Line projects the Probable Path of Price. It will tell us the State of the Trend. Remember, Price is in an Up Trend ***until it is not!***

115.50
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114.00
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87.75
87.00
86.25
85.50
84.75
84.00
83.25
82.50
81.75
81.00
80.25
79.50

■ +ES



The Median Line is a Trend Barrier. Because it gives you the areas where Price should run out of Energy to the Up Side and Down Side, It acts as a Balance Line. The Median Line and its Parallels will alert you when a Trend Change takes place.

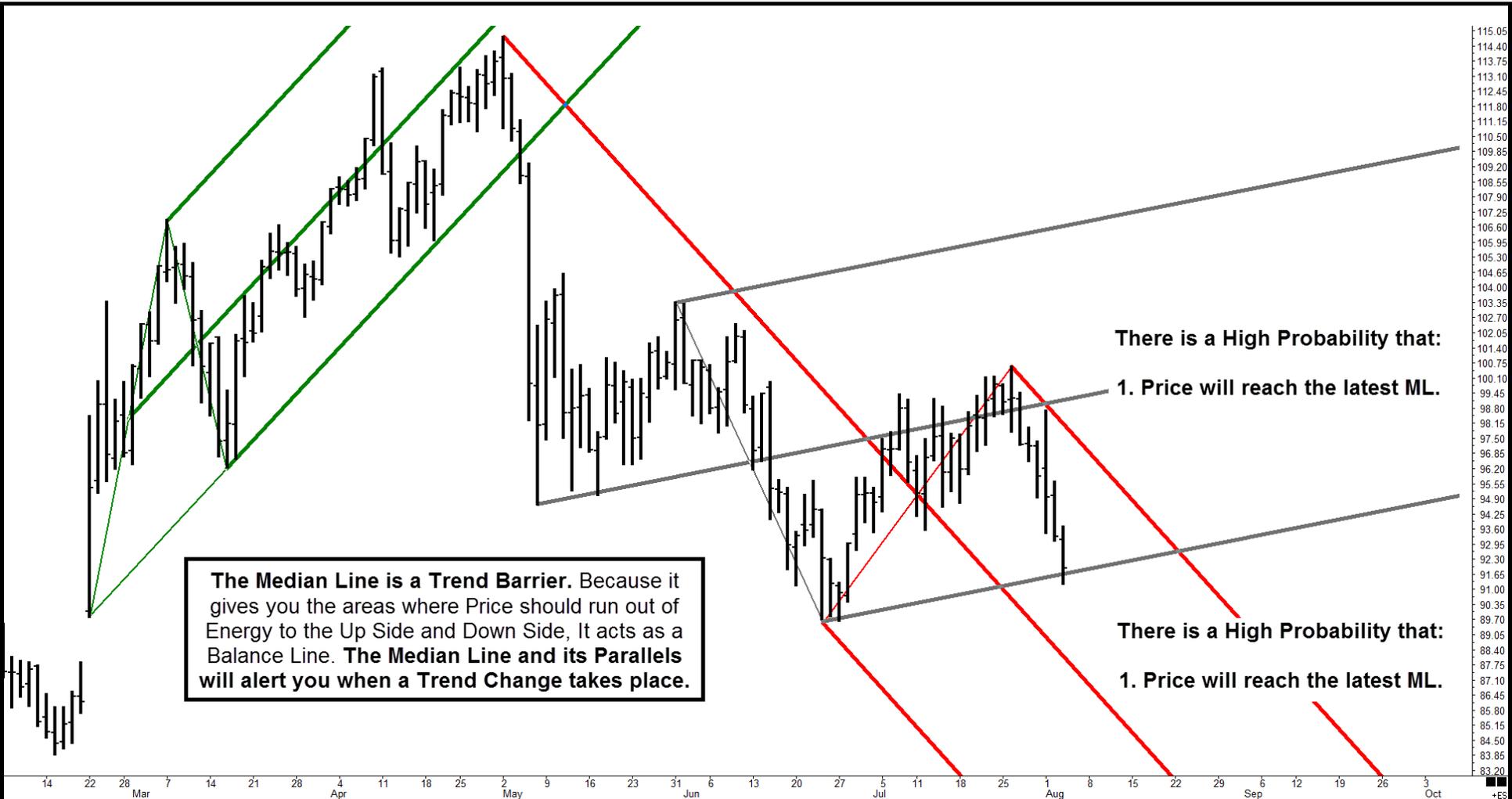
**There is a High Probability that:
1. Price will reach the latest ML.**

115.05
114.40
113.75
113.10
112.45
111.80
111.15
110.50
109.85
109.20
108.55
107.90
107.25
106.60
105.95
105.30
104.65
104.00
103.35
102.70
102.05
101.40
100.75
100.10
99.45
98.80
98.15
97.50
96.85
96.20
95.55
94.90
94.25
93.60
92.95
92.30
91.65
91.00
90.35
89.70
89.05
88.40
87.75
87.10
86.45
85.80
85.15
84.50
83.85
83.20

24 31 7 14 22 28 7 14 21 28 4 11 18 25 2 9 16 23 31 6 13 20 27 5 11 18 25 1 Aug 8 15 22 29

Feb Mar Apr May Jun Jul Aug

■ +ES



The Median Line is a Trend Barrier. Because it gives you the areas where Price should run out of Energy to the Up Side and Down Side, It acts as a Balance Line. **The Median Line and its Parallels will alert you when a Trend Change takes place.**

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113.10
112.45
111.80
111.15
110.50
109.85
109.20
108.55
107.90
107.25
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103.35
102.70
102.05
101.40
100.75
100.10
99.45
98.80
98.15
97.50
96.85
96.20
95.55
94.90
94.25
93.60
92.95
92.30
91.65
91.00
90.35
89.70
89.05
88.40
87.75
87.10
86.45
85.80
85.15
84.50
83.85
83.20

■ ES



The Median Line is a Trend Barrier. Because it gives you the areas where Price should run out of Energy to the Up Side and Down Side, It acts as a Balance Line. **The Median Line and its Parallels will alert you when a Trend Change takes place.**

- There is a High Probability that:**
- 1. Price will reach the latest ML.**
 - 2. Price will either reverse on meeting the ML or Gap through it.**
 - 3. When Prices pass through the ML, they will pull back to Retest it.**
 - 5. Prices reverse at any ML or extensions of a prior ML.**

Zoom → **Retest**

115.50
114.75
114.00
113.25
112.50
111.75
111.00
110.25
109.50
108.75
108.00
107.25
106.50
105.75
105.00
104.25
103.50
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85.50
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84.00
83.25
82.50
81.75
81.00
80.25
79.50



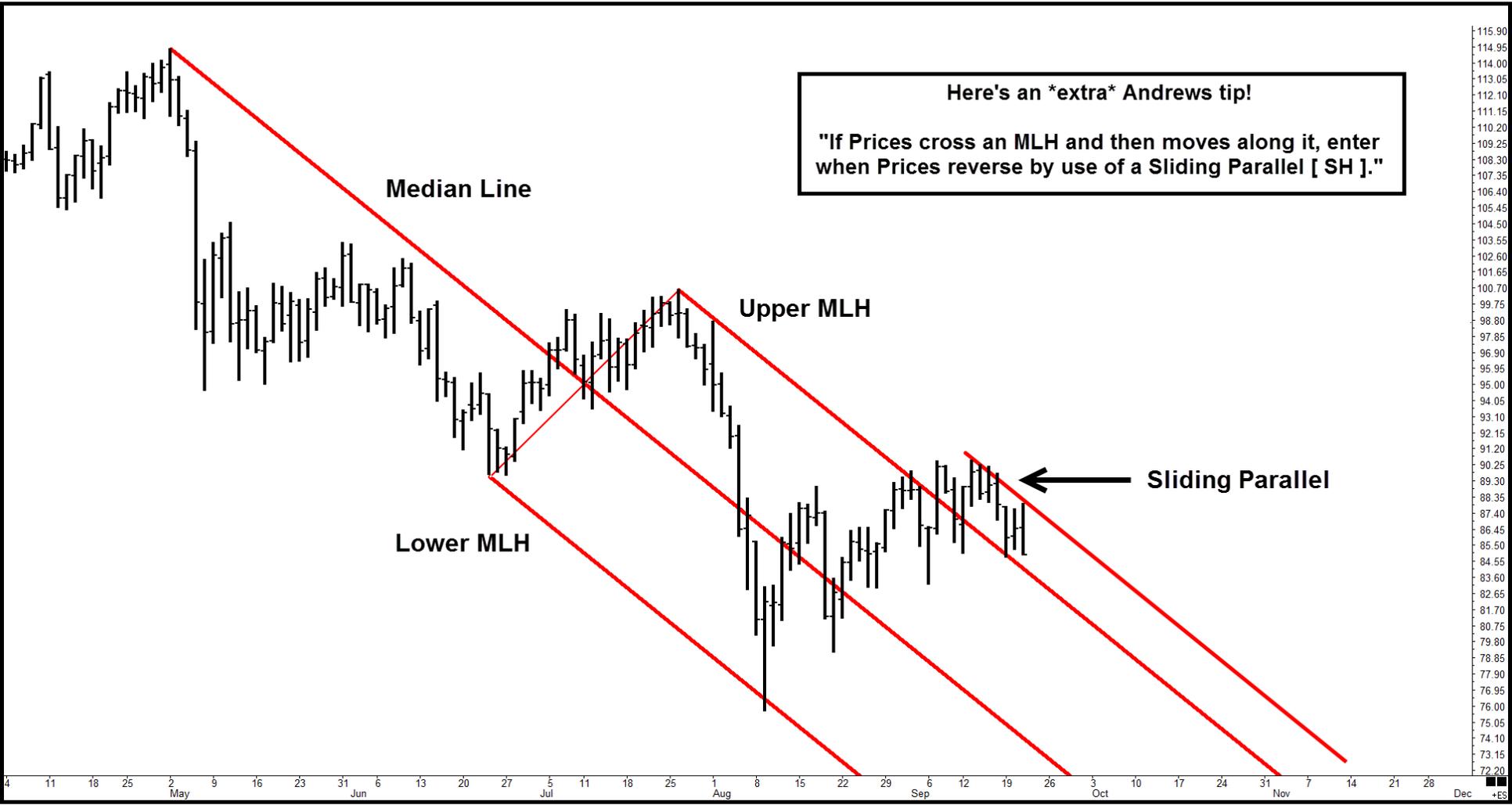
The Median Line is a Trend Barrier. Because it gives you the areas where Price should run out of Energy to the Up Side and Down Side, It acts as a Balance Line. **The Median Line and its Parallels will alert you when a Trend Change takes place.**

Home work!!! What's going on at each of the *Circles*?

- There is a High Probability that:**
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 - 2. Price will either reverse on meeting the ML or Gap through it.**
 - 3. When Prices pass through the ML, they will pull back to Retest it.**
 - 5. Prices reverse at any ML or extensions of a prior ML.**

117.00
116.10
115.20
114.30
113.40
112.50
111.60
110.70
109.80
108.90
108.00
107.10
106.20
105.30
104.40
103.50
102.60
101.70
100.80
99.90
99.00
98.10
97.20
96.30
95.40
94.50
93.60
92.70
91.80
90.90
90.00
89.10
88.20
87.30
86.40
85.50
84.60
83.70
82.80
81.90
81.00
80.10
79.20
78.30
77.40
76.50
75.60
74.70
73.80

14 22 28 7 14 21 28 4 11 18 25 2 May 9 16 23 31 Jun 6 13 20 27 5 11 18 25 1 Aug 8 15 22 29 6 Sep



Here's an *extra* Andrews tip!
"If Prices cross an MLH and then moves along it, enter when Prices reverse by use of a Sliding Parallel [SH]."

Median Line

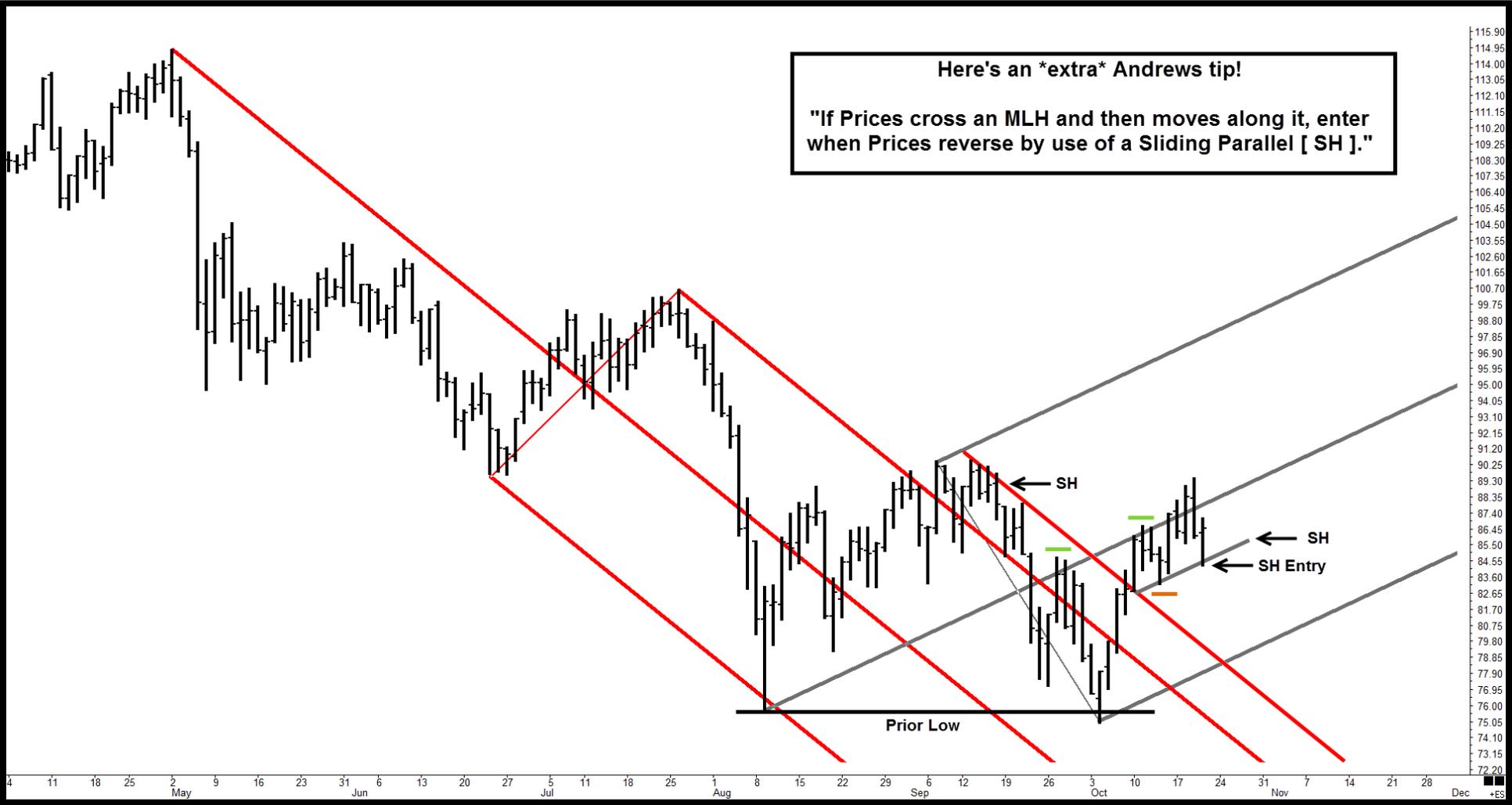
Upper MLH

Lower MLH

Sliding Parallel

115.90
114.95
114.00
113.05
112.10
111.15
110.20
109.25
108.30
107.35
106.40
105.45
104.50
103.55
102.60
101.65
100.70
99.75
98.80
97.85
96.90
95.95
95.00
94.05
93.10
92.15
91.20
90.25
89.30
88.35
87.40
86.45
85.50
84.55
83.60
82.65
81.70
80.75
79.80
78.85
77.90
76.95
76.00
75.05
74.10
73.15
72.20

4 11 18 25 2 May 9 16 23 31 Jun 6 13 20 27 Jul 5 11 18 25 Aug 1 8 15 22 29 Sep 6 12 19 26 Oct 3 10 17 24 31 Nov 7 14 21 28 Dec



Here's an *extra* Andrews tip!

"If Prices cross an MLH and then moves along it, enter when Prices reverse by use of a Sliding Parallel [SH]."

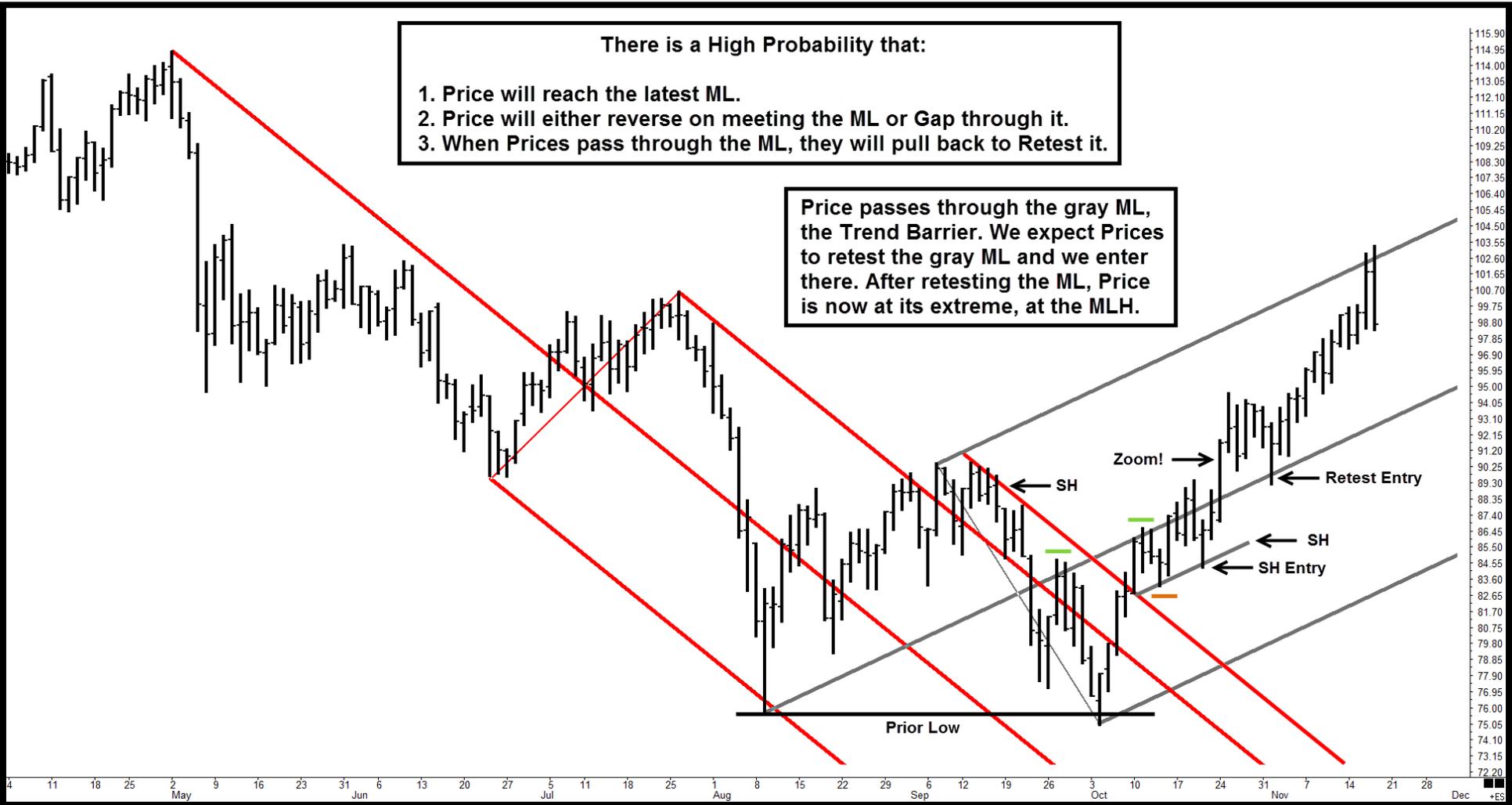
← SH

← SH

← SH Entry

Prior Low

115.90
114.95
114.00
113.05
112.10
111.15
110.20
109.25
108.30
107.35
106.40
105.45
104.50
103.55
102.60
101.65
100.70
99.75
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97.85
96.90
95.95
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94.05
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91.20
90.25
89.30
88.35
87.40
86.45
85.50
84.55
83.60
82.65
81.70
80.75
79.80
78.85
77.90
76.95
76.00
75.05
74.10
73.15
72.20



There is a High Probability that:

- 1. Price will reach the latest ML.**
- 2. Price will either reverse on meeting the ML or Gap through it.**
- 3. When Prices pass through the ML, they will pull back to Retest it.**

Price passes through the gray ML, the Trend Barrier. We expect Prices to retest the gray ML and we enter there. After retesting the ML, Price is now at its extreme, at the MLH.

115.90
114.95
114.00
113.05
112.10
111.15
110.20
109.25
108.30
107.35
106.40
105.45
104.50
103.55
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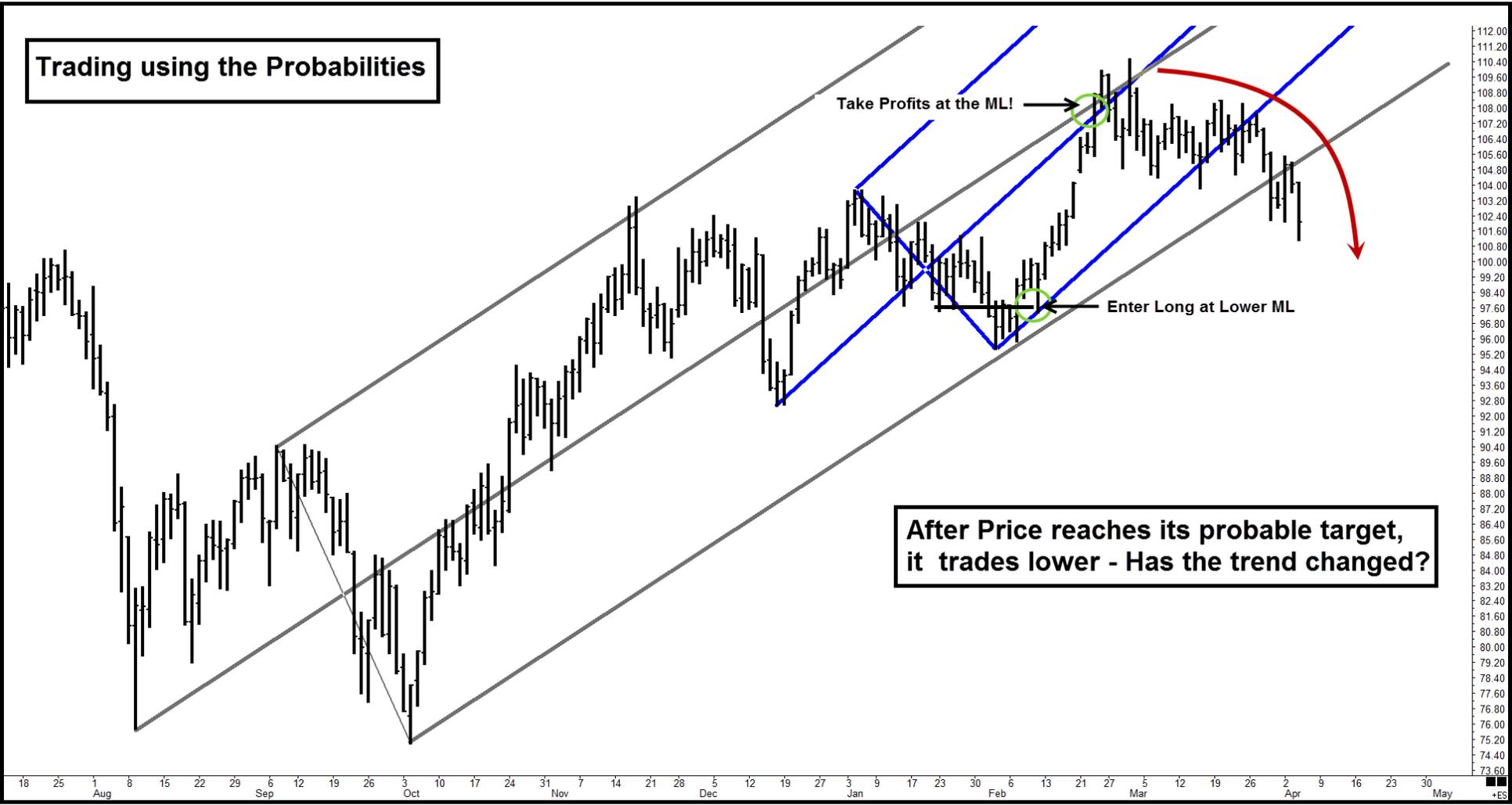
4 11 18 25 2 May 9 16 23 31 Jun 6 13 20 27 Jul 5 11 18 25 Aug 1 8 15 22 29 Sep 6 12 19 26 Oct 3 10 17 24 31 Nov 7 14 21 28 Dec +ES

When Price stays within a range, it is restoring its spent Energy. The Median Line provides Time for Price to rebuild Energy: Price moved from the Upper MLH to the Lower MLH, while trading within a range.

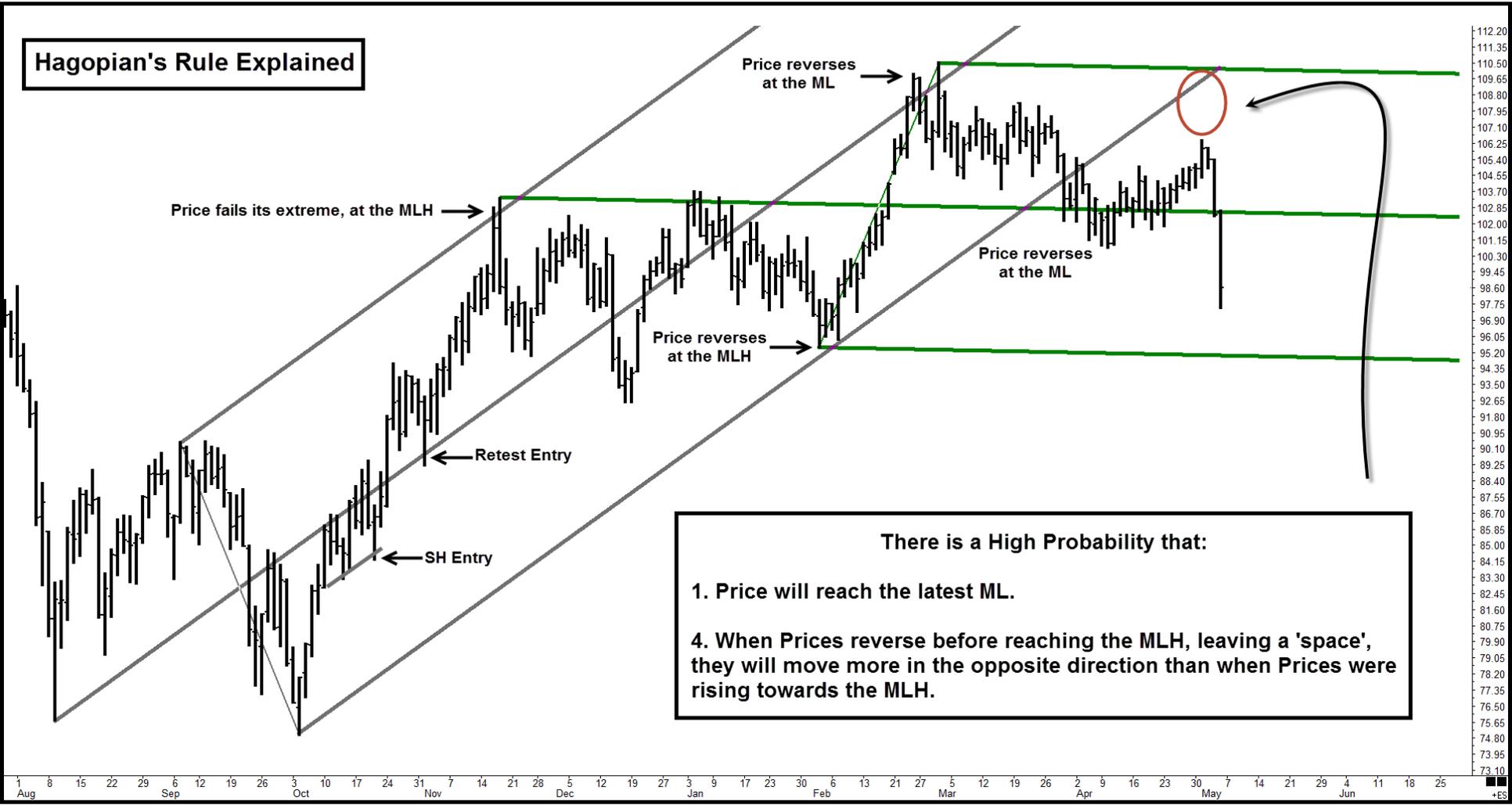


We can draw a minor ML set inside the larger gray ML. All ML sets carry the same probability, so even in this new inside ML, we know Price will likely reach the Median Line. If Price comes back to test the blue minor Lower MLH, it would be a trade entry set up with a high probability target.

Trading using the Probabilities



Hagopian's Rule Explained



There is a High Probability that:

1. Price will reach the latest ML.
4. When Prices reverse before reaching the MLH, leaving a 'space', they will move more in the opposite direction than when Prices were rising towards the ML.

112.20
111.35
110.50
109.65
108.80
107.95
107.10
106.25
105.40
104.55
103.70
102.85
102.00
101.15
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78.20
77.35
76.50
75.65
74.80
73.95
73.10

Hagopian's Rule Explained



112.00
111.20
110.40
109.60
108.80
108.00
107.20
106.40
105.60
104.80
104.00
103.20
102.40
101.60
100.80
100.00
99.20
98.40
97.60
96.80
96.00
95.20
94.40
93.60
92.80
92.00
91.20
90.40
89.60
88.80
88.00
87.20
86.40
85.60
84.80
84.00
83.20
82.40
81.60
80.80
80.00
79.20
78.40
77.60
76.80
76.00
75.20
74.40
73.60

MLH

ML

MLH

1st Warning Line

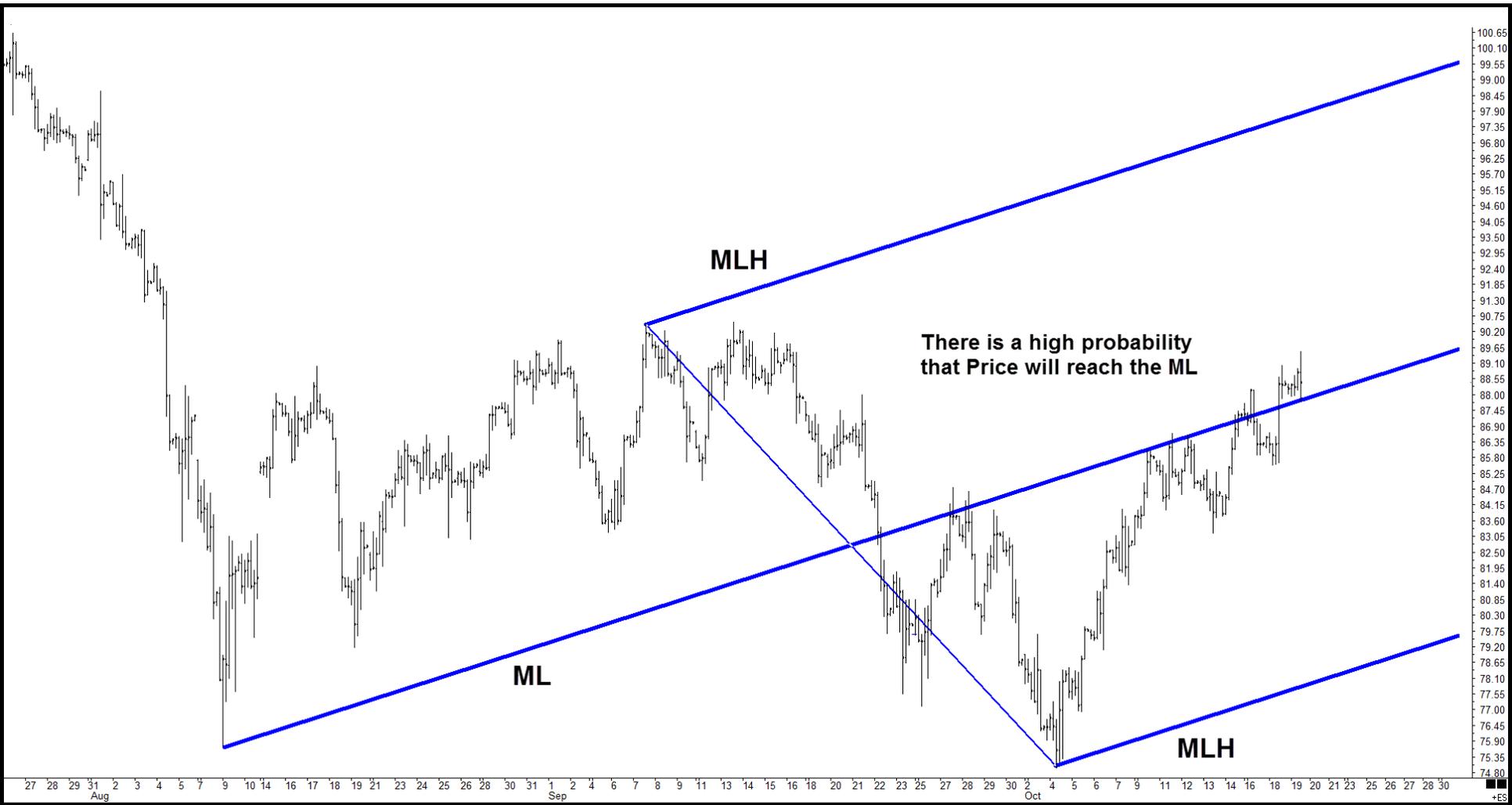
2nd Warning Line

Price reverses, leaving a 'space'...

...causing Prices to move further in the opposite direction!

When Prices reverse before reaching the MLH, leaving a 'space', they will move more in the opposite direction than when Prices were rising towards the MLH.

Let's see if we can put these five principles to work!



100.65
100.10
99.55
99.00
98.45
97.90
97.35
96.80
96.25
95.70
95.15
94.60
94.05
93.50
92.95
92.40
91.85
91.30
90.75
90.20
89.65
89.10
88.55
88.00
87.45
86.90
86.35
85.80
85.25
84.70
84.15
83.60
83.05
82.50
81.95
81.40
80.85
80.30
79.75
79.20
78.65
78.10
77.55
77.00
76.45
75.90
75.35
74.80

■
+ES



When Prices pass through the ML, they will pull back to it.

Zoom →

← Retest

96.30
95.85
95.40
94.95
94.50
94.05
93.60
93.15
92.70
92.25
91.80
91.35
90.90
90.45
90.00
89.55
89.10
88.65
88.20
87.75
87.30
86.85
86.40
85.95
85.50
85.05
84.60
84.15
83.70
83.25
82.80
82.35
81.90
81.45
81.00
80.55
80.10
79.65
79.20
78.75
78.30
77.85
77.40
76.95
76.50
76.05
75.60
75.15
74.70
74.25

Sep

Oct

Nov

■
+ES



Prices will reach the latest ML

Price needs Time to restore Energy

Prices will reach the latest ML

Sep

Oct

Nov

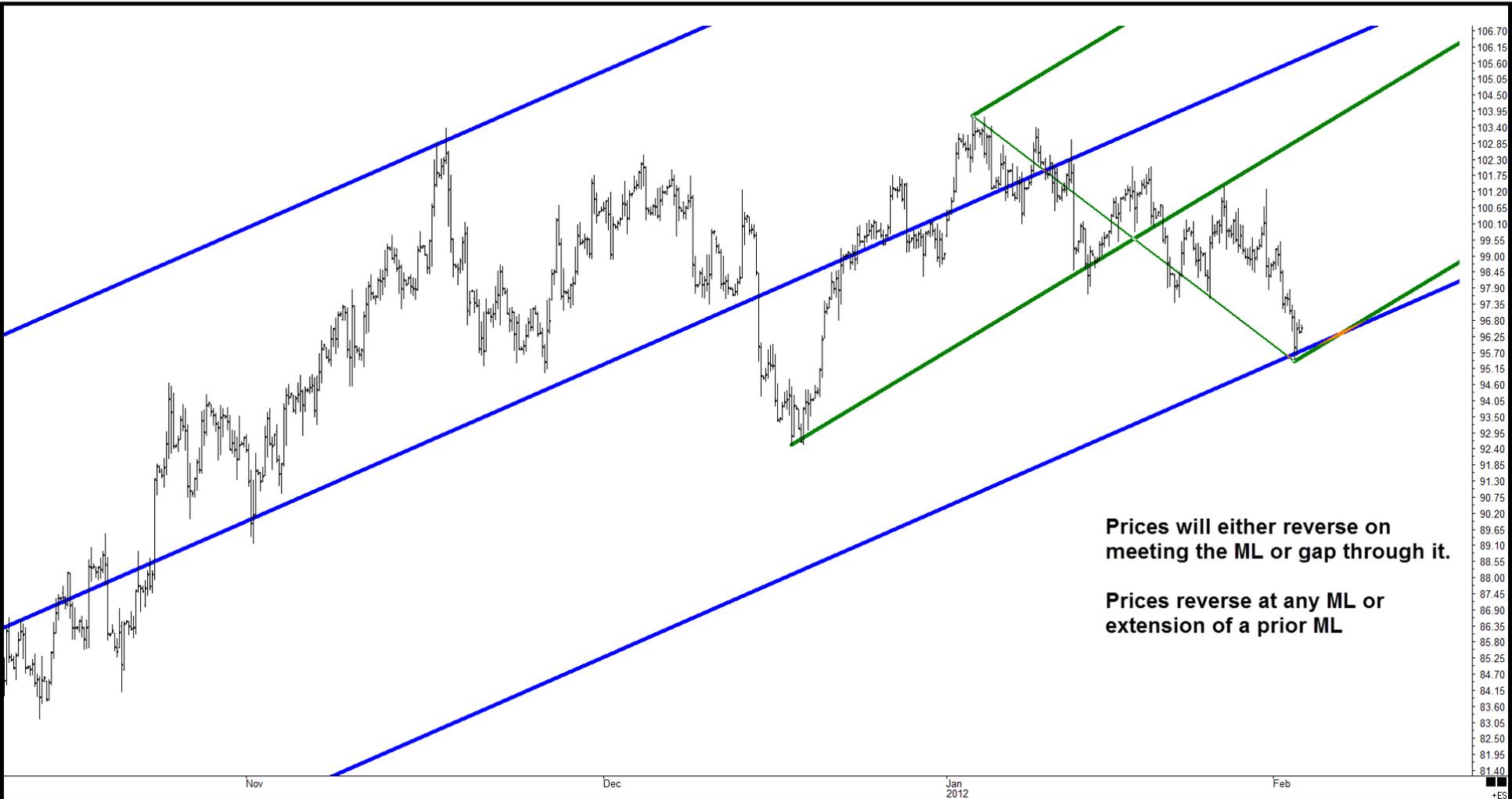
Dec

Jan
2012

Feb

105.70
105.00
104.30
103.60
102.90
102.20
101.50
100.80
100.10
99.40
98.70
98.00
97.30
96.60
95.90
95.20
94.50
93.80
93.10
92.40
91.70
91.00
90.30
89.60
88.90
88.20
87.50
86.80
86.10
85.40
84.70
84.00
83.30
82.60
81.90
81.20
80.50
79.80
79.10
78.40
77.70
77.00
76.30
75.60
74.90
74.20

■
+ES



Prices will either reverse on meeting the ML or gap through it.

Prices reverse at any ML or extension of a prior ML

Nov

Dec

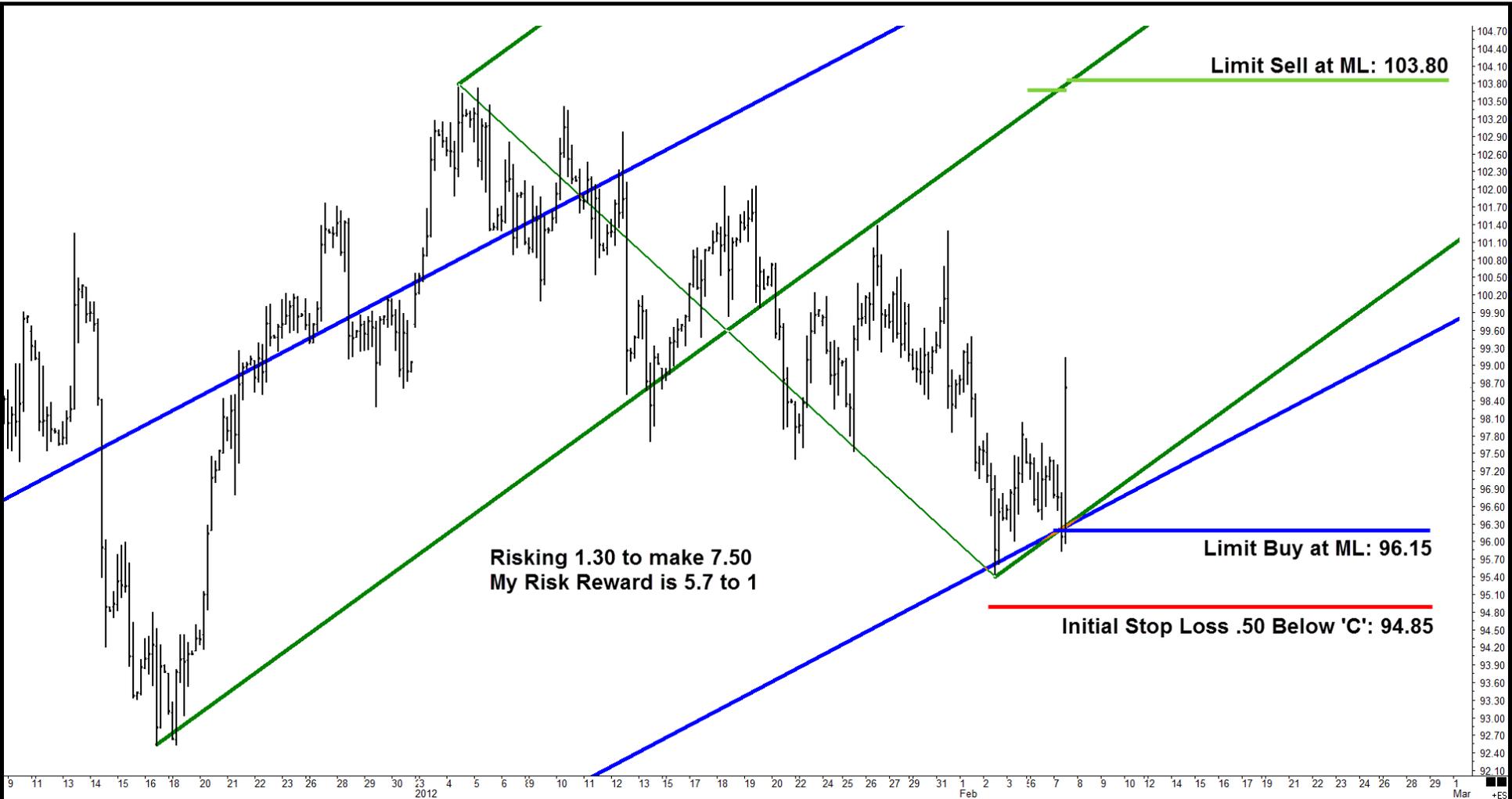
Jan
2012

Feb

106.70
106.15
105.60
105.05
104.50
103.95
103.40
102.85
102.30
101.75
101.20
100.65
100.10
99.55
99.00
98.45
97.90
97.35
96.80
96.25
95.70
95.15
94.60
94.05
93.50
92.95
92.40
91.85
91.30
90.75
90.20
89.65
89.10
88.55
88.00
87.45
86.90
86.35
85.80
85.25
84.70
84.15
83.60
83.05
82.50
81.95
81.40

■
+ES





Risking 1.30 to make 7.50
My Risk Reward is 5.7 to 1

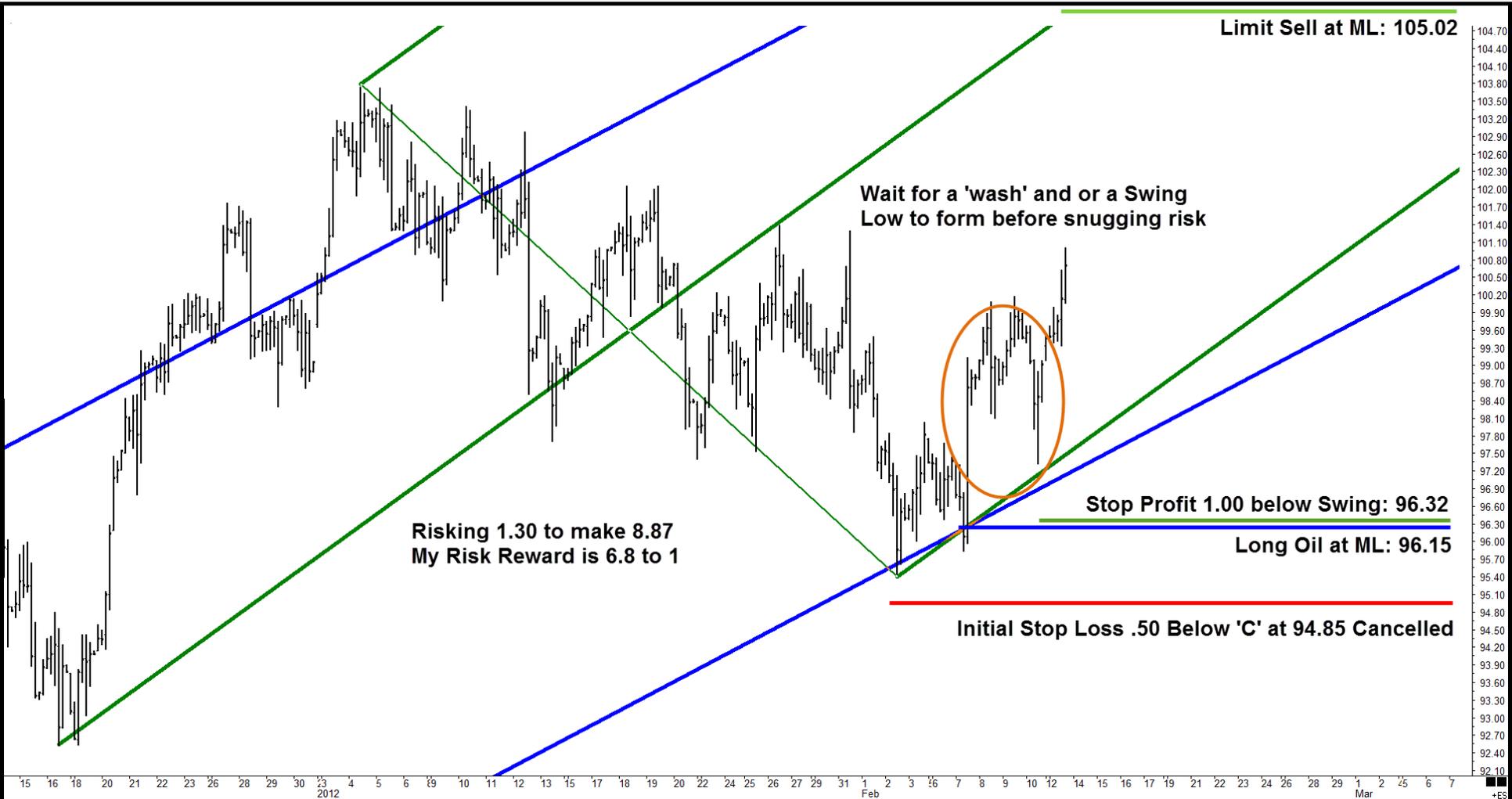
Limit Sell at ML: 103.80

Limit Buy at ML: 96.15

Initial Stop Loss .50 Below 'C': 94.85

104.70
104.40
104.10
103.80
103.50
103.20
102.90
102.60
102.30
102.00
101.70
101.40
101.10
100.80
100.50
100.20
99.90
99.60
99.30
99.00
98.70
98.40
98.10
97.80
97.50
97.20
96.90
96.60
96.30
96.00
95.70
95.40
95.10
94.80
94.50
94.20
93.90
93.60
93.30
93.00
92.70
92.40
92.10

9 11 13 14 15 16 18 20 21 22 23 26 28 29 30 23 4 5 6 8 9 10 11 12 13 15 17 18 19 20 22 24 25 26 27 29 31 1 2 3 6 7 8 9 10 12 14 15 16 17 19 21 22 23 24 26 28 29 1 Mar



Limit Sell at ML: 105.02

Wait for a 'wash' and or a Swing Low to form before snugging risk

Risking 1.30 to make 8.87
My Risk Reward is 6.8 to 1

Stop Profit 1.00 below Swing: 96.32

Long Oil at ML: 96.15

Initial Stop Loss .50 Below 'C' at 94.85 Cancelled

15 16 18 20 21 22 23 26 28 29 30 23 4 5 6 9 10 11 12 13 15 17 18 19 20 22 24 25 26 27 29 31 1 2 3 6 7 8 9 10 12 14 15 16 17 19 21 22 23 24 26 28 29 1 2 5 6 7
2012 Feb Mar

104.70
104.40
104.10
103.80
103.50
103.20
102.90
102.60
102.30
102.00
101.70
101.40
101.10
100.80
100.50
100.20
99.90
99.60
99.30
99.00
98.70
98.40
98.10
97.80
97.50
97.20
96.90
96.60
96.30
96.00
95.70
95.40
95.10
94.80
94.50
94.20
93.90
93.60
93.30
93.00
92.70
92.40
92.10

■
+ES



Risked 1.30 to make 12.91
My Risk Reward was 9.9 to 1

Prices will reach the latest ML.

Limit Sell at ML filled: 109.90

Stop Profit 1.00 below Gap Low: 103.30

Prices reverse at any ML

Stop Profit at 96.32 Cancelled

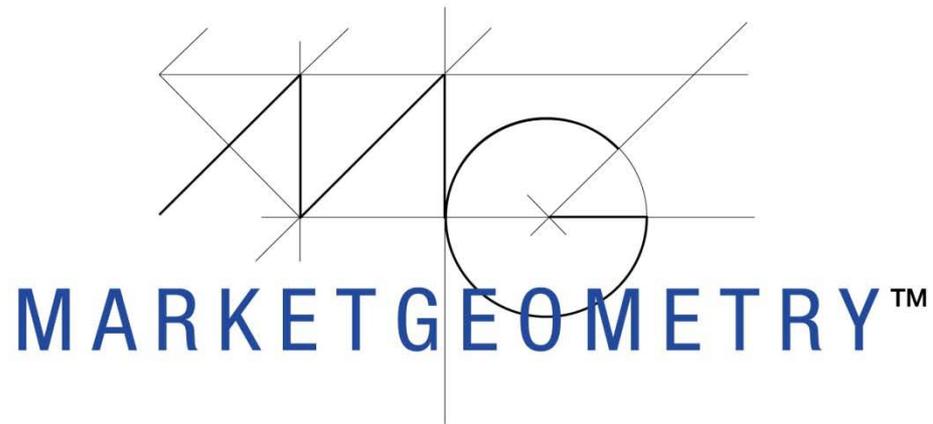
Long Oil at ML: 96.15

Initial Stop Loss .50 Below 'C' at 94.85 Cancelled

28 29 30 23 4 5 6 9 10 11 12 13 15 17 18 19 20 22 24 25 26 27 29 31 1 2 3 6 7 8 9 10 12 14 15 16 17 19 21 22 23 24 26 28 29 1 2 5 6 7 8 9 11 13 14 15 16 18 20
2012 Feb Mar

110.60
110.25
109.90
109.55
109.20
108.85
108.50
108.15
107.80
107.45
107.10
106.75
106.40
106.05
105.70
105.35
105.00
104.65
104.30
103.95
103.60
103.25
102.90
102.55
102.20
101.85
101.50
101.15
100.80
100.45
100.10
99.75
99.40
99.05
98.70
98.35
98.00
97.65
97.30
96.95
96.60
96.25
95.90
95.55
95.20
94.85
94.50
94.15

■
+ES

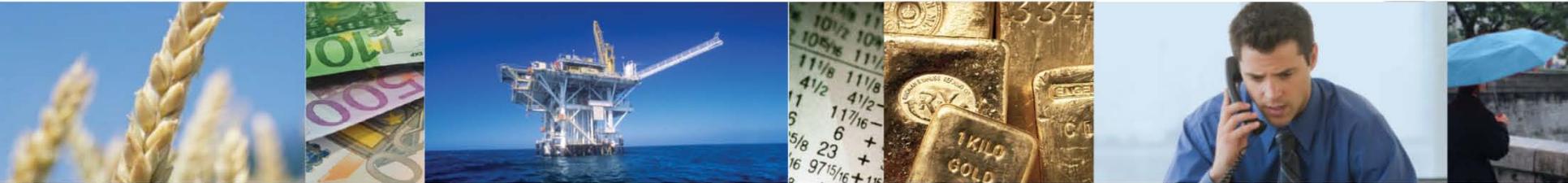


Thank You for taking the time to attend this session. Questions?

"Master your tools, master yourself."

®Timothy Morge

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- **No uptick rule or short selling restrictions**
- **Around the clock markets**
- **Financial safeguards** of a regulated exchange

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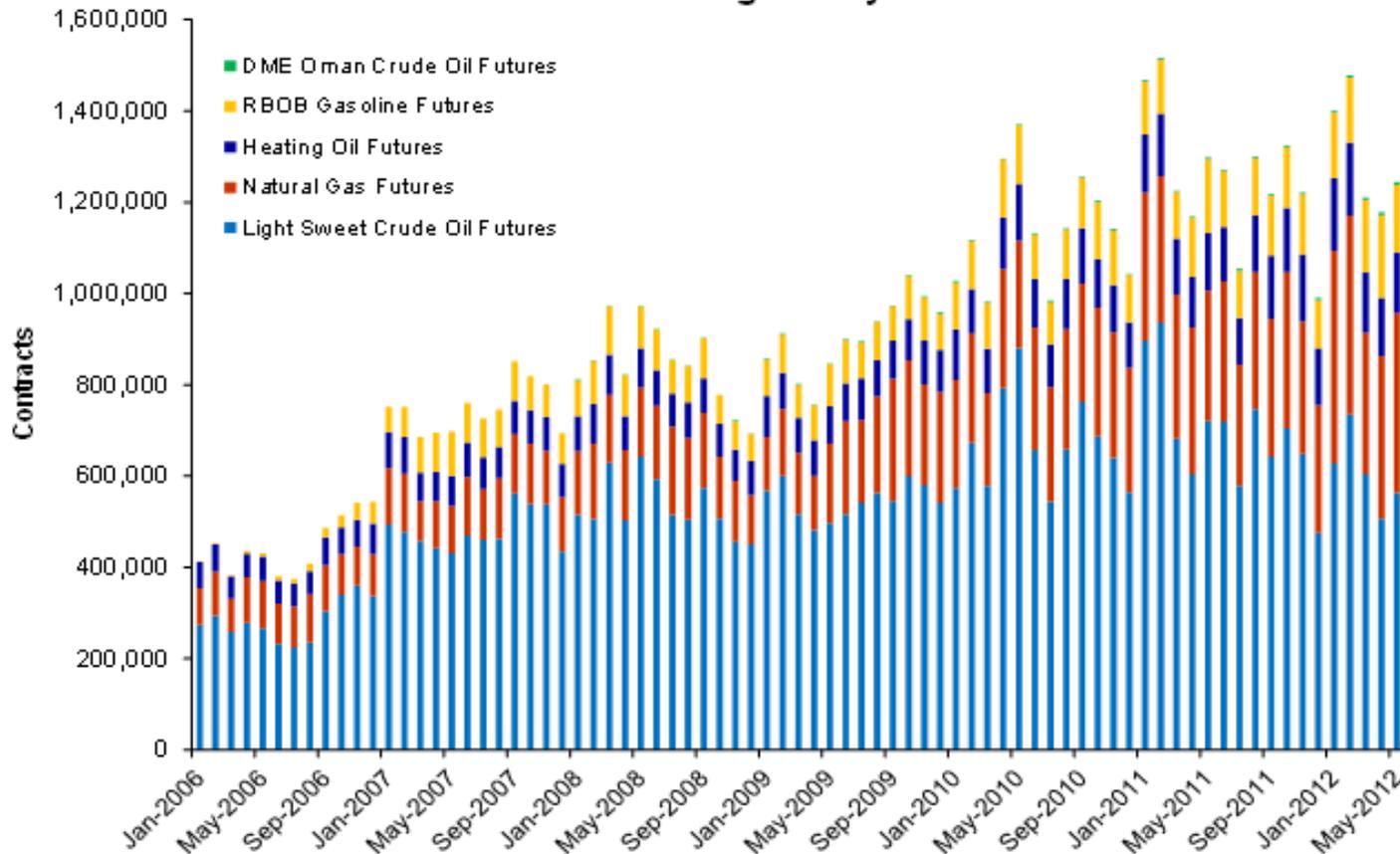
Crude Oil: CL, WS, BZ, QM

Natural Gas: NG, NN

Refined Product: RB, HO

Ethanol: QEN

Futures - Average Daily Volumes



Why Trade? What Drives Energy Prices?

Physical energy products are subject to myriad fundamental price drivers, and derivatives help hedge against future price volatility.

