

Energy Futures Markets- Five Fallacies

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Powerhouse: The Power of Price Protection

TeamLevine, formerly of Morgan Stanley, created the new firm, *Powerhouse*.

The *Powerhouse* team has 100 years of experience in the energy marketplace. We work with clients to help protect profit margins and grow their business by designing and implementing hedging strategies.

Powerhouse provides a suite of additional services including support for marketing, and guidance on coordinating physical products and financial tools for customers.

Markets Served: Crude Oil, Petroleum Products, Propane, Natural Gas,
Electricity

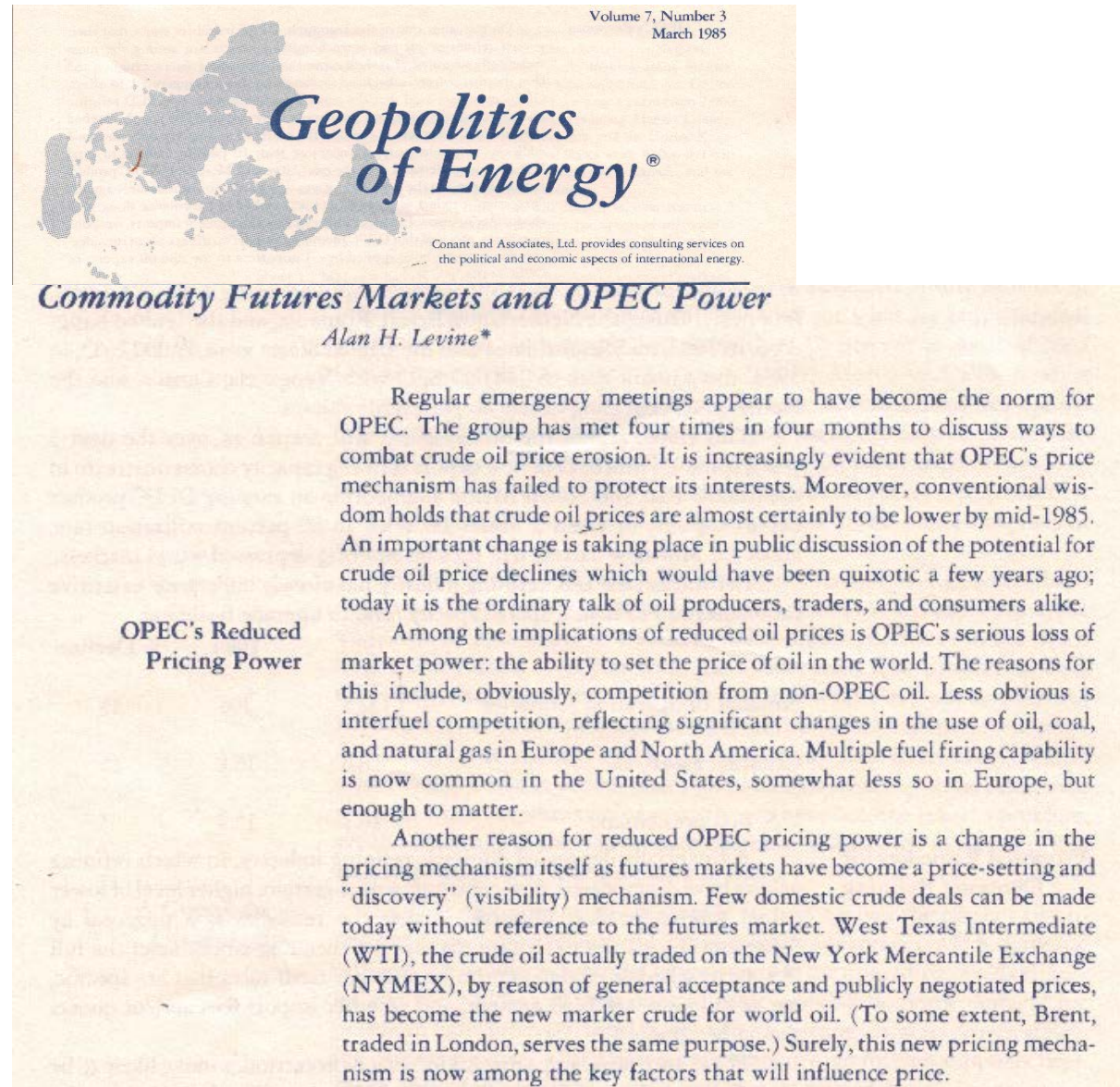
Some Features of Futures Market (NYMEX)

- Energy futures are traded on the New York Mercantile Exchange (NYMEX)
- NYMEX is owned by the CME Group (Chicago Mercantile Exchange)
- The exchange is regulated by the CFTC
- Futures are traded competitively in an anonymous auction
- Allows for price discovery (price transparency)
- Cash deposit required (margin)
- Standardized contracts
- Delivery only occurs on a very small portion of all the contracts traded
- Because most futures contracts are liquidated instead of delivered, energy futures contracts are also known as "paper barrels"
- Financial performance is guaranteed by the exchange

Some Common Misconceptions About Futures Markets and Hedging

#1 Doctors and dentists can control the price of oil and natural gas

A Different Kind of Oil Shock



OPEC's Reduced Pricing Power

Regular emergency meetings appear to have become the norm for OPEC. The group has met four times in four months to discuss ways to combat crude oil price erosion. It is increasingly evident that OPEC's price mechanism has failed to protect its interests. Moreover, conventional wisdom holds that crude oil prices are almost certainly to be lower by mid-1985. An important change is taking place in public discussion of the potential for crude oil price declines which would have been quixotic a few years ago; today it is the ordinary talk of oil producers, traders, and consumers alike.

Among the implications of reduced oil prices is OPEC's serious loss of market power: the ability to set the price of oil in the world. The reasons for this include, obviously, competition from non-OPEC oil. Less obvious is interfuel competition, reflecting significant changes in the use of oil, coal, and natural gas in Europe and North America. Multiple fuel firing capability is now common in the United States, somewhat less so in Europe, but enough to matter.

Another reason for reduced OPEC pricing power is a change in the pricing mechanism itself as futures markets have become a price-setting and "discovery" (visibility) mechanism. Few domestic crude deals can be made today without reference to the futures market. West Texas Intermediate (WTI), the crude oil actually traded on the New York Mercantile Exchange (NYMEX), by reason of general acceptance and publicly negotiated prices, has become the new marker crude for world oil. (To some extent, Brent, traded in London, serves the same purpose.) Surely, this new pricing mechanism is now among the key factors that will influence price.

The Futures Markets Were Created as a Venue for Commercial Entities to Lay Off Their Risk

Crude Oil

CRUDE OIL, LIGHT SWEET - NEW YORK MERCANTILE EXCHANGE

CFTC Commitment of Traders *Combined Futures and Options*
03/04/2014

Reportable Positions as of 03/04/2014							Non- Reportable Positions	
Speculators			Commercial		Total			
Long	Short	Spreading	Long	Short	Long	Short	Long	Short
528505	75676	835361	813113	1281166	2176979	2192203	111446	96221
Changes from last report - Change in Open Interest: 86255								
5724	-3362	52236	30042	41556	88001	90430	-1746	-4175
Percent of Open Interest for each category of traders								
23.1	3.3	36.5	35.5	56.0	95.1	95.8	4.9	4.2
Number of traders in each category; Total Traders: 164								
164	83	191	97	111	339	325		
(CONTRACTS OF 1,000 BARRELS)							Open Interest: 2288425	

Heating oil

#2 HEATING OIL, NY HARBOR-ULSD - NEW YORK MERCANTILE EXCHANGE

CFTC Commitment of Traders *Combined Futures and Options*
03/04/2014

Reportable Positions as of 03/04/2014							Non- Reportable Positions	
Speculators			Commercial		Total			
Long	Short	Spreading	Long	Short	Long	Short	Long	Short
70661	56939	41317	161679	198539	273657	296796	47016	23877
Changes from last report - Change in Open Interest: 4639								
-1792	-592	3000	4791	4749	5999	7156	-1360	-2517
Percent of Open Interest for each category of traders								
22.0	17.8	12.9	50.4	61.9	85.3	92.6	14.7	7.4
Number of traders in each category; Total Traders: 52								
52	32	46	67	84	144	139		
(CONTRACTS OF 42,000 U.S. GALLONS)							Open Interest: 320673	

Source: CFTC , 321 Energy

Hedging

- Risk management strategy used to limit the probability of loss from fluctuations in the price of a commodity
- The purpose of a hedge is to avoid the risk of adverse price moves impacting the bottom line
- The goal of hedging is to defend your profit margin against energy price volatility, and allow you to concentrate on growing your business
- A hedger has a physical situation at risk for price fluctuation

Speculating

- Engaging in business transactions involving risk but offering the chance of profit
- Taking large risks, especially with respect to trying to predict the future
- A speculator does not have a physical position at risk

Some Common Misconceptions About Futures Markets and Hedging

#2 Many in the financial community (and the press) have a clear understanding of the difference between hedging and speculating

May 30, 2008, 1:32 pm

When Keeping It Hedged Goes Wrong

Posted by MarketBeat Staff

Geoffrey Rogow of Dow Jones Newswires reports:

So much for playing it safe.

Oil and gas producers who **did the prudent thing and locked in future sales prices have seen their shares slide** in just over a week amid oil's continued trade around \$130 a barrel, near record highs. And with the shift away from shares of those hedgers in the stock market, **investors appear to be betting against a fall in the prices of oil and gas** anytime soon.



Among the larger hedgers are [Chesapeake Energy](#), [Range Resources](#) and [Petroleum Development](#). And though all three had production and revenue increases in the first quarter, each also reported **significant charges from their hedging activity that led to either losses or a sharp earnings decline**.

Still, the surge in energy prices led to strong first-quarter earnings reports for most exploration and production companies, with investors pushing the [SPDR Standard & Poor's Oil & Gas Exploration & Production ETF](#) up 43% since Jan. 23. Even the charges from **mark-to-market losses related to hedging had done little to stop the momentum**, as the largest hedgers' stock performance had mirrored the sector-wide gains for much of the year.

But since May 20, shares of Range and Petroleum Development **have fallen more than 10%**, while Chesapeake has dropped 6%. Over the same period, **the Oil & Gas ETF fell 4%**.

"When they made these hedges, they thought they were being very smart. Would they rather take that back now? Sure," said Kenneth Carroll, analyst for Johnson Rice & Co.

To be sure, hedging is an essential part of the business plan for many oil and gas producers. By locking in the price of future sales, these companies can be **less exposed to the whims of the market and can lock in future cash flows**. While the energy majors have enough cash on their balance sheets to withstand the ebbs and flows of oil and gas prices, these smaller firms are largely thought to be better off in the long term if they hedge.

In the short term, however, some hedged positions could weigh on companies' profits. For 2008, **most hedged positions have already been locked in place**, with analysts noting many of the hedged trades occurred during the fourth-quarter, when a forward hedging contract was most likely set around \$105 a barrel — **roughly 24% below current market levels**.

[Newfield Exploration Co.](#) recently reset its oil hedge position for 2009 and 2010 at a cost of \$520 million. The company said **the transaction costs will be recovered** through higher realized prices in both years.

While **a reset of hedging seems extreme**, a more likely scenario would involve some hedgers taking fewer longer-term positions on the price of oil.

Source: WSJ

NYMEX Natural Gas Price



Remember: The Goal of Hedging is to Protect Profit Margins

“We are not hedged because we think the forward price curve has rolled up as high as it can, but because we know exactly what our cost inputs are and the price level at which we can make good money. If we can lock in a price that provides unusually healthy returns to shareholders, we consider it management malpractice not to do so.”

-Aubrey McClendon, The American Oil and Gas Reporter, October 2006

Some Common Misconceptions About Futures Markets and Hedging

#3 Open profits on futures hedges are opportunities to make distributions to shareholders

Southwest's President and CEO on Hedging

“To just put hedging in perspective though, over the last decade, we’ve saved about \$4 billion with hedging, and that literally translates in to our being able to afford purchasing, about 130-140 aircraft. So had we not hedged in other words, you’d see a fleet that was much smaller and far fewer jobs than what we have today, so it kind of puts in perspective the value that hedging brings to the Company. And it blunts the effect, in an immediate sense of a sharp spike in fuel prices, so we do that.”

Source: Transcript- Gary Kelly on 2010 4Q earnings,
<http://www.blogsouthwest.com/podcast/gary-kelly-2010-4q-earnings>

Hedging is NOT a Profit Center

“Southwest values its current portfolio of hedges at \$2.8 billion. That is such a hefty amount that on last month's conference call with analysts, Southwest's chief executive officer, Gary Kelly, was asked whether the airline should just sell its hedges, distribute the money to shareholders and then raise fares to deal with higher fuel costs. ‘Only if we want to go bankrupt,’ the CEO retorted.”

- Wall Street Journal, “Why Rivals Don't Copy Southwest's Hedging?”
May 28, 2008; Page B2

How Companies Can Use Hedging Tools

These are the types of issues we help our customers with on a regular basis

1. Retail gasoline/diesel margin squeeze
 - C-store & truck-stop margin risk
 - Wholesaler volume risk
2. Time and/or distance price risks (storage or pipeline risk)
3. Commercial & Industrial clients
 - Fixed price deals, current or deferred time frames
 - Capped price deals
 - Max-min price deals (collars)
 - Selling puts to establish length and/or enhance margin
4. Retail clients
 - Fixed price deals for customers
 - Cap deals for customers
5. Storage owners can take advantage of carry in the market
6. Producer price protection
 - Locking in price
 - Setting a floor
 - Collars and ratio collars (1:2's)
7. Basis hedging

Some Common Misconceptions About Futures Markets and Hedging

#4 You can't sell something you do not own

Definition: Long

- **Long:** A buy
- **Long:** Anything you own:
 - Long futures
 - Long physicals
 - Long the basis
 - Long puts
- Long hedgers

Definition: Short

- **Short:** A sale
- **Short:** Anything you have sold:
 - Short futures
 - Short physicals
 - Short the basis
 - Short puts
- Short hedgers
- Short covering

Short Futures (Sale)

An initial “sell” order establishes a short position. A short futures represents a promise to deliver the commodity at a set price on a future date. Most commodity futures shorts are covered by an offsetting futures purchase before the delivery date.

Some Common Misconceptions About Futures Markets and Hedging

#5 Options are very expensive

Options as an Insurance Policy: An Analogy

- Option BUYER (policy holder)
 - Pays premium
 - Receives right (to reimbursement if risk occurs)
- Option SELLER (policy writer)
 - Receives premium
 - Takes on obligation (to reimburse policy holder if risk occurs)

Puts & Calls

- Calls gain value as prices rise (are “called up”)
 - Risk avoided: prices rising
- Puts gain value as prices fall (are “put down”)
 - Risk avoided: prices falling

Recent Comments From

Fuel end user: I am really worried about these higher prices.

Supplier: We can lock-in your price so you don't have to worry if the price keeps going up.

Fuel end-user: But what happens if this is a repeat of 2008? Back then you told me to lock-in and prices collapsed and I was stuck with all those high priced gallons.

Supplier: Well, there is something else we can do. But it's really expensive.

This is not the most effective way to present a valuable solution to the dilemma now facing end-users.

There are three things that can happen when you buy an option And two of them are GOOD

Prices go higher – Long calls, or inventory protected by puts, both gain value.

Prices go lower – Long puts gain value. Long calls, while providing upside protection, allow owner to benefit from now lower prices.

Prices go sideways – No dramatic price moves, options likely to expire worthless.

Some Other Common Misconceptions About Futures Markets and Hedging

- If you're not careful, you could wind up with barrels of crude oil delivered to your swimming pool
- Hedging is risky
- If we want to use futures in our business we need to hire a full time trader
- Hedging is only for the "Big Boys"

Why Energy Futures Markets Matter

- Prices in the futures market react quickly to changes in global supply and demand
- Futures prices are connected to your local price
- Futures (and option) contracts are the instruments companies use to manage price risk

Buyers in Petroleum Spot Markets Do Not Buy and Sell Price, They Buy and Sell “Diffs”

OPIS SPOT TICKER

OPIS Market Watch ▶ OPIS Reports ▶ OPIS News ▶ OPIS Historical Prices ▶ OPIS Deal Log

Live Overview

Last updated: 03/14/2014 02:36:16 ET

[Hide Overview](#)

NYMEX	WTI (CL)			BRENT			RBOB (RB)			ULSD (HO)								
	Price	Change		Price	Change		Price	Change		Price	Change							
	Apr 2014	98.8900	+.6900	Apr 2014	108.5700	+1.1800	Apr 2014	2.9597	+0.268	Apr 2014	2.9431	+0.235						
	May 2014	98.5600	+6.200	May 2014	108.1600	+1.2400	May 2014	2.9502	+0.261	May 2014	2.9282	+0.241						
	WTI 3:2:1	25.1850	+3.894	BRENT 3:2:1	15.5050	-1.006	Jun 2014	2.9197	+0.262	Jun 2014	2.9210	+0.236						
East	CBOB						RBOB UNL						ULS#2					
	Cash Price	Cash Change	Basis Diff	Basis Change	Cycle Timing	Ref Month	Cash Price	Cash Change	Basis Diff	Basis Change	Cycle Timing	Ref Month	Cash Price	Cash Change	Basis Diff	Basis Change	Cycle Timing	Ref Month
NYHB**	2.7372	+0.243	-.2225	-.0025	PMPT	APR	2.7372	+0.243	-.2225	-.0025	PMPT	APR	2.9831	+0.135	+0.400	-.0100	PMPT	APR
GC**	2.7447	+0.218	-.2150	-.0050	C16	APR	2.8797	-.0032	-.0800	-.0300	C16	APR	2.9031	+0.260	-.0400	+0.0025	C16	APR
G3*	2.8497	+0.218	-.1100	-.0050	PMPT	APR	---	---	---	---	---	---	2.9681	+0.285	+0.0250	+0.0050	PMPT	APR
Chi**	2.9247	+0.368	-.0350	+0.100	Mar2	APR	2.9697	+0.368	+0.100	+0.100	Mar2	APR	2.9831	+0.135	+0.400	-.0100	Mar2	APR
West	CARBOB						CARB#2						ULS#2					
	Cash Price	Cash Change	Basis Diff	Basis Change	Cycle Timing	Ref Month	Cash Price	Cash Change	Basis Diff	Basis Change	Cycle Timing	Ref Month	Cash Price	Cash Change	Basis Diff	Basis Change	Cycle Timing	Ref Month
LA*	2.8847	+0.218	-.0750	-.0050	MAR	APR	2.8681	+0.235	-.0750	---	MAR	APR	2.8581	+0.235	-.0850	---	MAR	APR
SF*	2.9197	+0.068	-.0400	-.0200	MAR	APR	2.9031	+0.0535	-.0400	+0.0300	MAR	APR	2.9031	+0.0535	-.0400	+0.0300	MAR	APR
PNW*	2.8497	+0.268	-.1100	---	PMT MAR	APR	---	---	---	---	---	---	2.9531	+0.235	+0.100	---	PMT MAR	APR
LA PPR	2.9552	+0.261	+0.0050	---	APR	MAY	2.9132	+0.241	-.0150	---	APR	MAY	---	---	---	---	---	---

Source: OPIS

Added Bonus!

Futures markets allow us to study crowd psychology

And the basic human struggle between Fear and Greed

Also called "Technical Analysis"

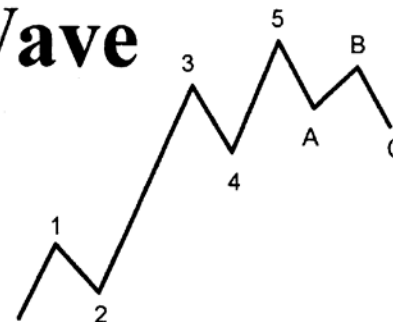
Technical Analysis: The study of market movement

Technical traders believe:

1. It is impossible to know all of the news and items that fundamentally affect price at any given point in time
2. Even if this wealth of information were known, it is too rapidly changing to allow for interpretation and corrective action
3. The news is dated and widely disseminated by the time it is received
4. Money is either made or lost in the price movement. Therefore efforts should be conducted in the study of price movement

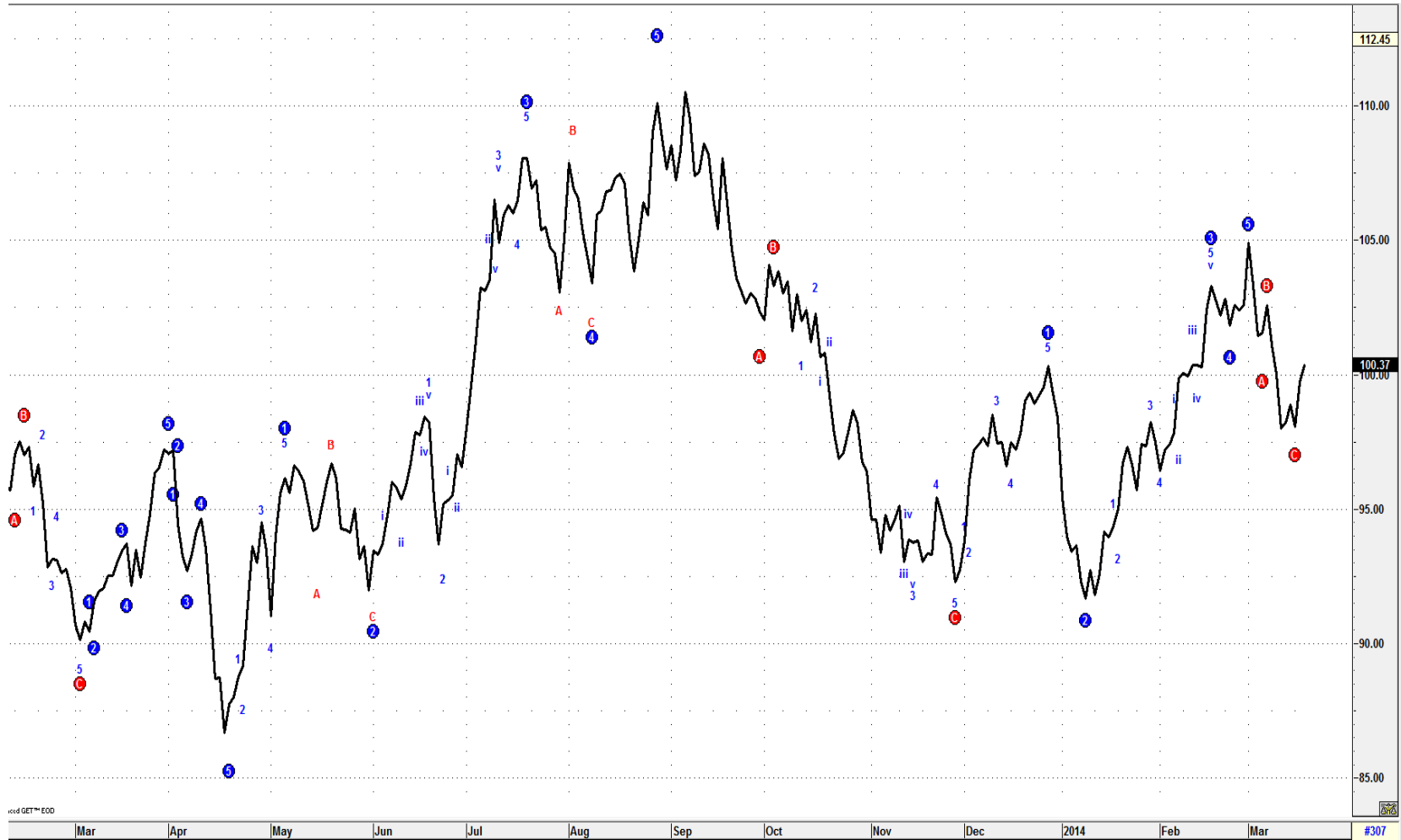
Elliot Wave Theory

Riding the Wave



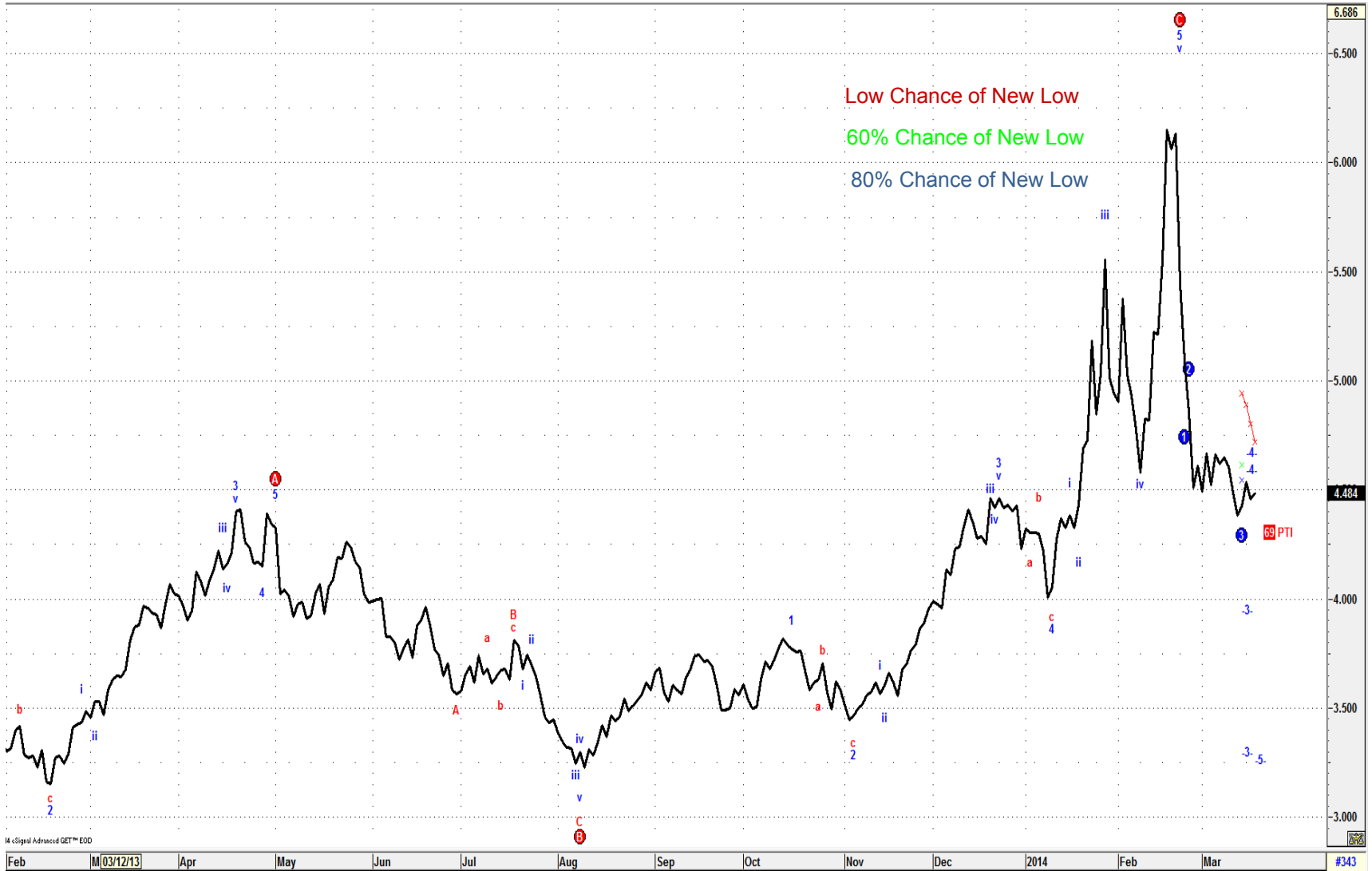
1. Price Moves in Waves
 - A. 5-Wave Advance (Impulse)
 - B. 3-Wave Retracement (Corrective)
2. Third Wave Often the Longest, Never the Shortest
3. Fourth Wave Correction Should Not Overlap First Impulse Wave
4. Fifth Wave Length Equal to First Wave
5. Fibonacci Relationships
 - A. Fibonacci Series, Each Number is the Sum of Two Preceding Numbers
 - B. 1,1,2,3,5,8,13,21,34,55,89,144,233,377,610,987
 - C. Important Ratios
 1. Each Number is 1.618 of Preceding Number
 2. Each Number is 0.618 of Following Number
 - D. Valuable in Estimating Price Objectives and Entry Points

Wave Count: Crude Oil Futures Chart NYMEX



Source: www.eSignal.com

Wave Count: Continuation Natural Gas Chart



H ©Signal Advanced GET™ EOD

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