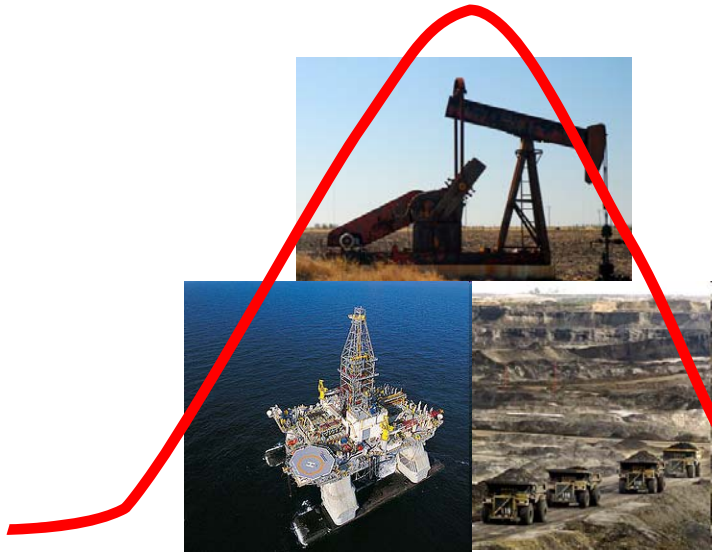


Crude Oil Price Forecast and Investment/Hedging Strategies

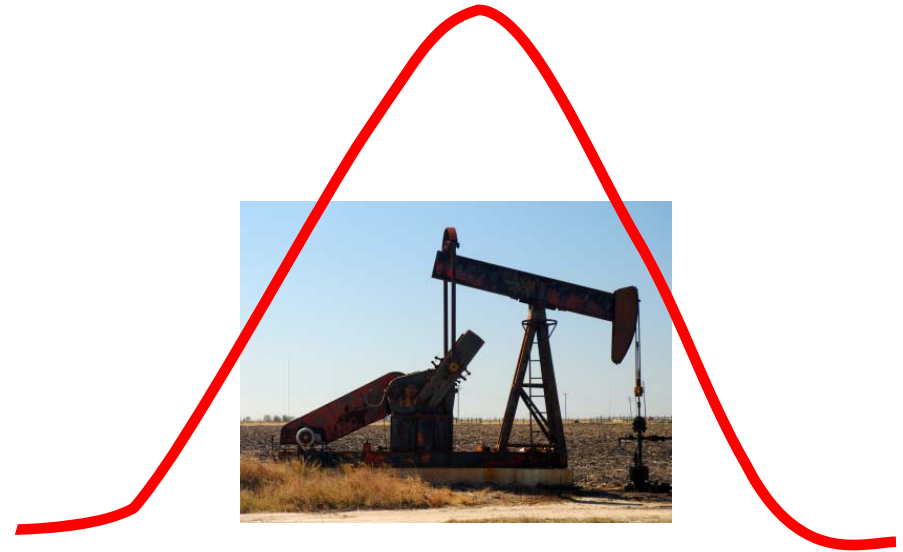
Erik Townsend

Peak Oil vs. Peak Cheap Oil

Peak Oil



Peak Cheap Oil



Crude Oil “Price Floors”

Conventional Oil



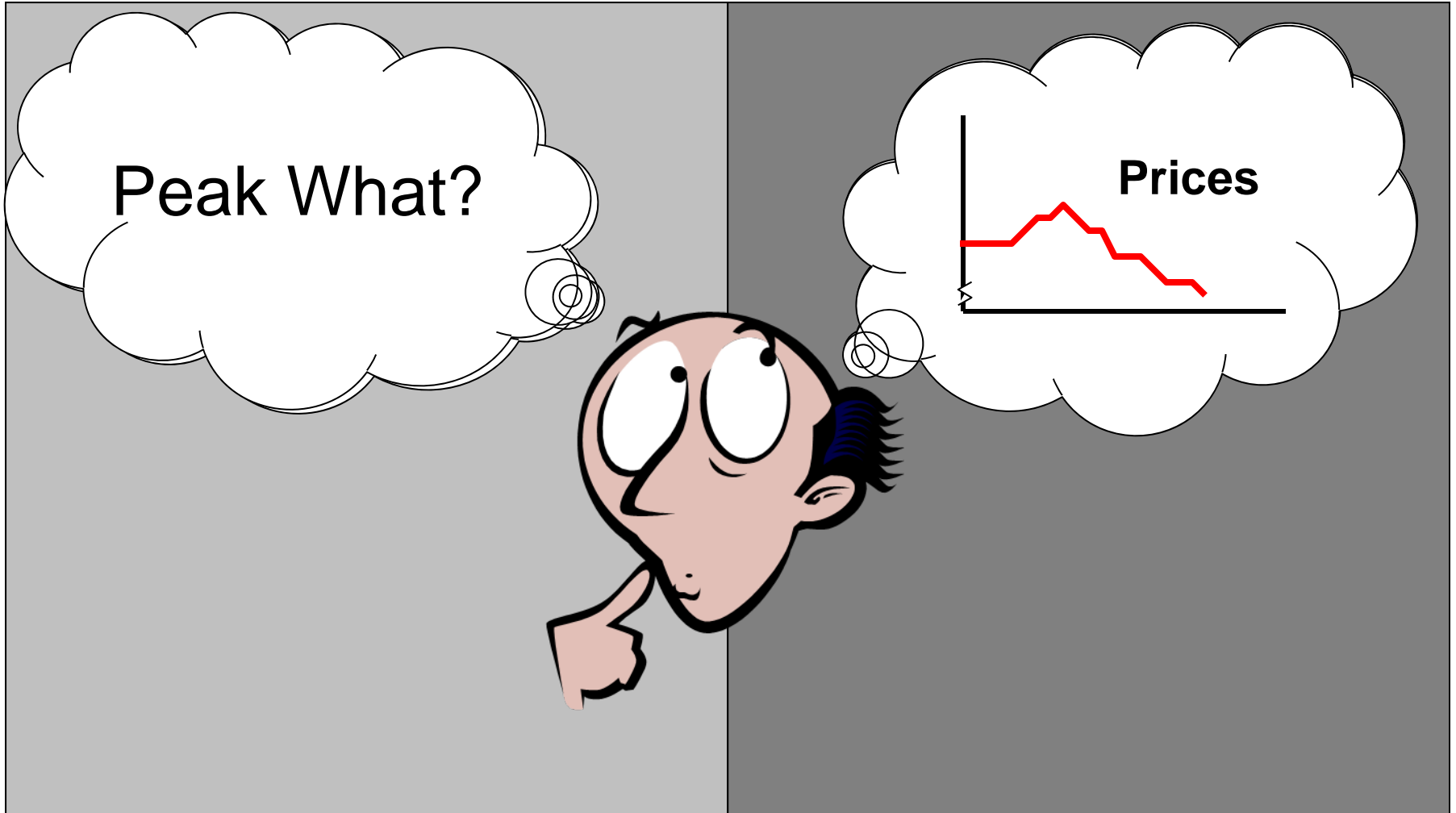
~\$20/bbl

Non-Conventional Oil



~\$70/bbl

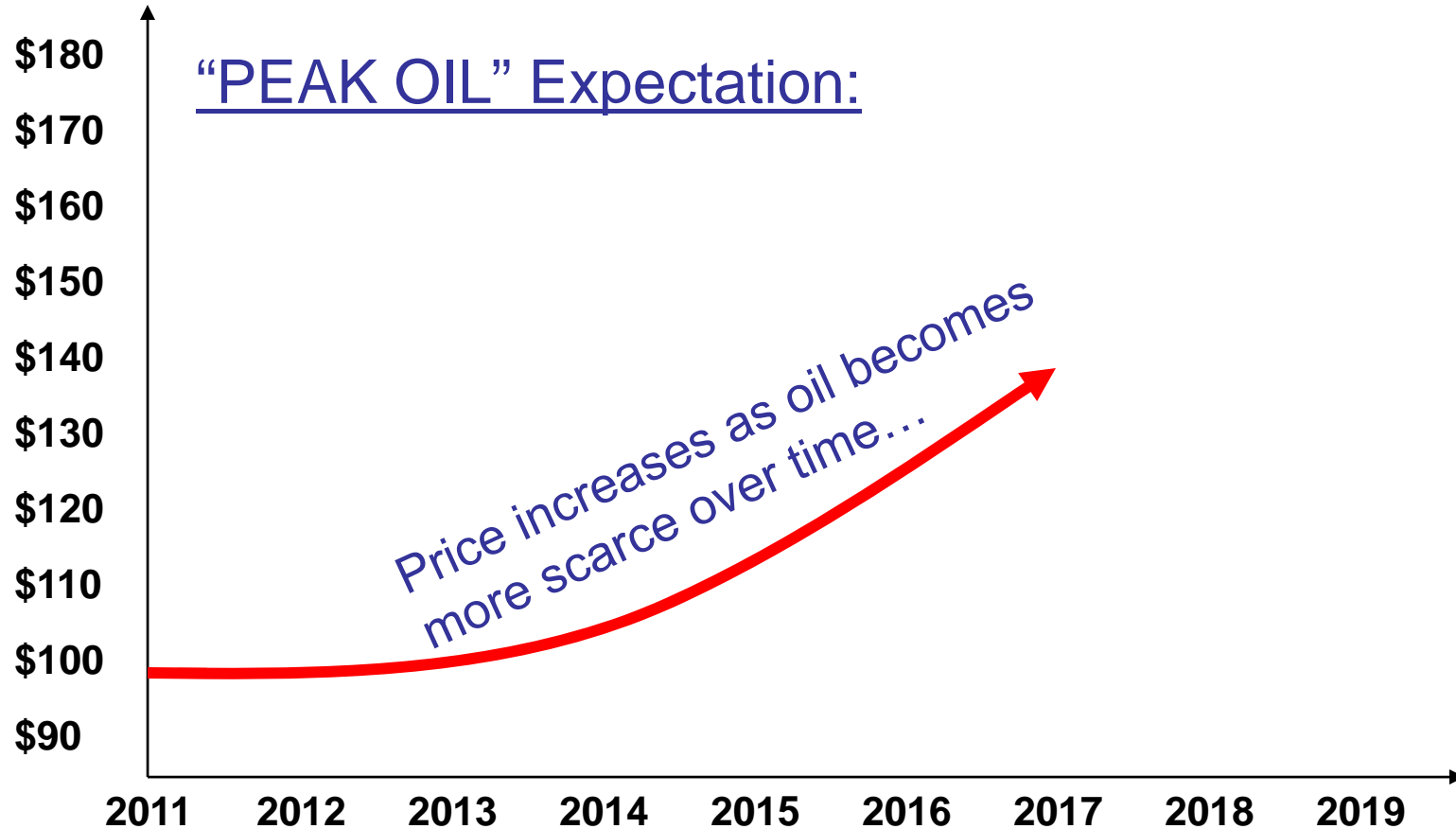
Markets: What's Peak Oil?



“Term Structure”

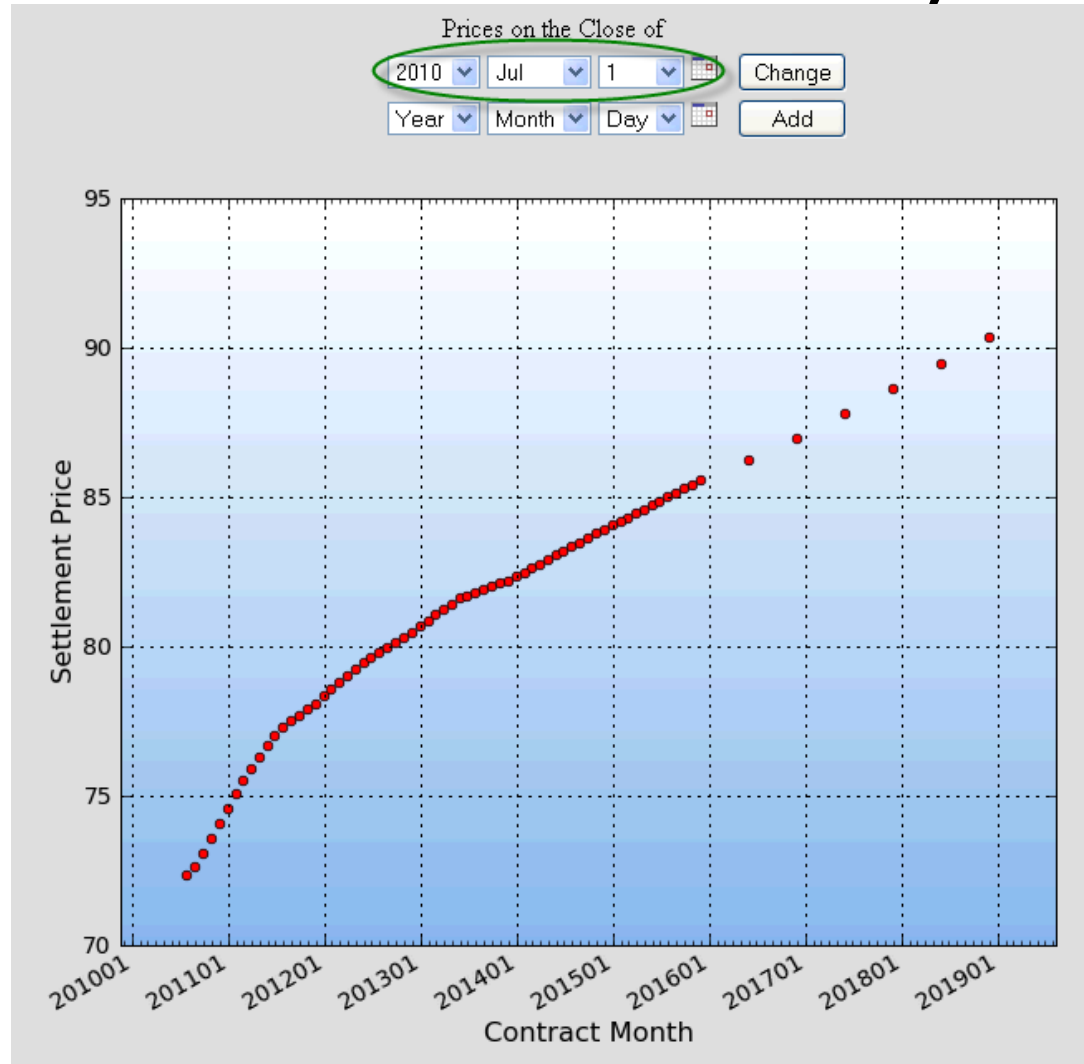


Term Structure and Peak Oil

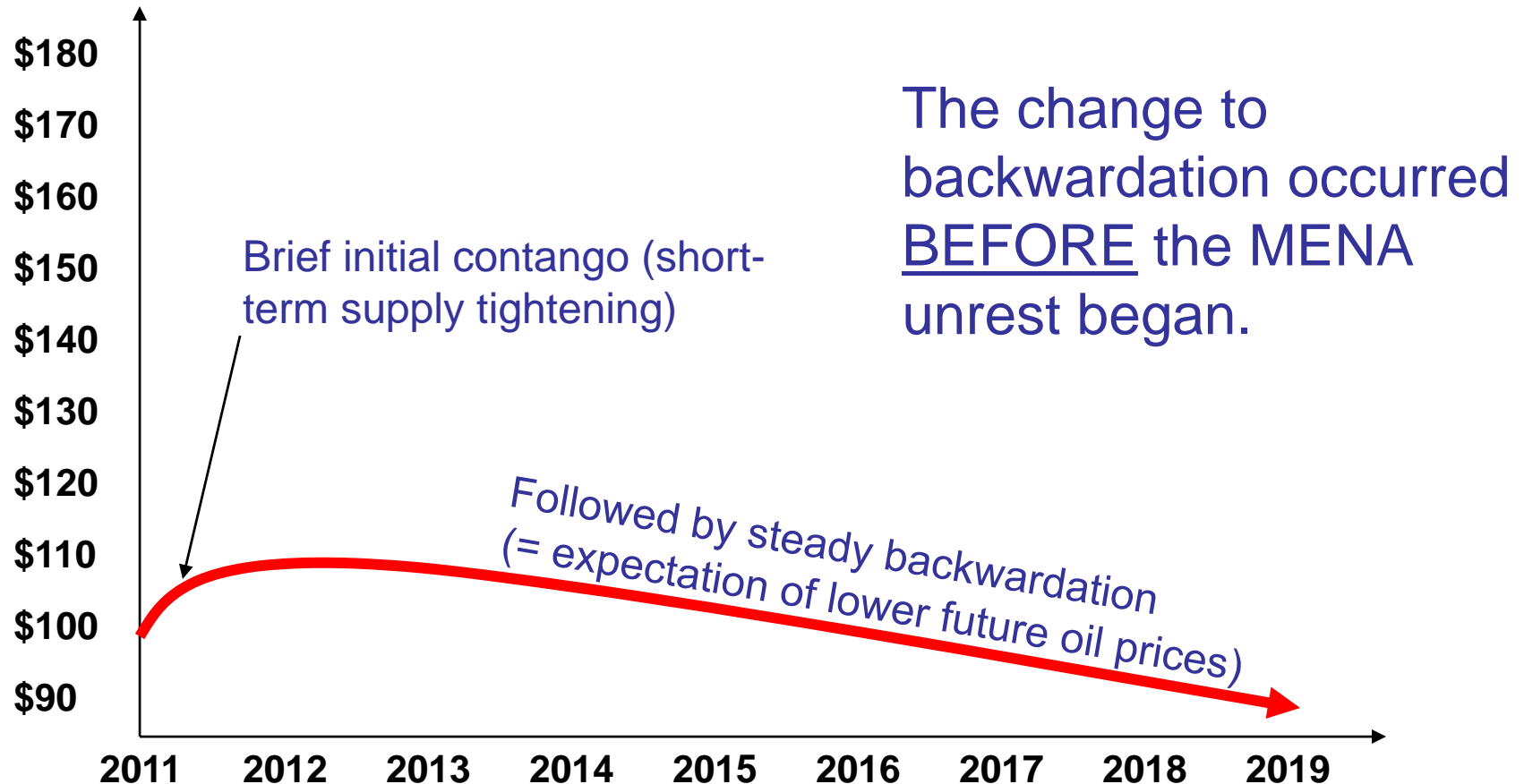


Brent Crude Oil

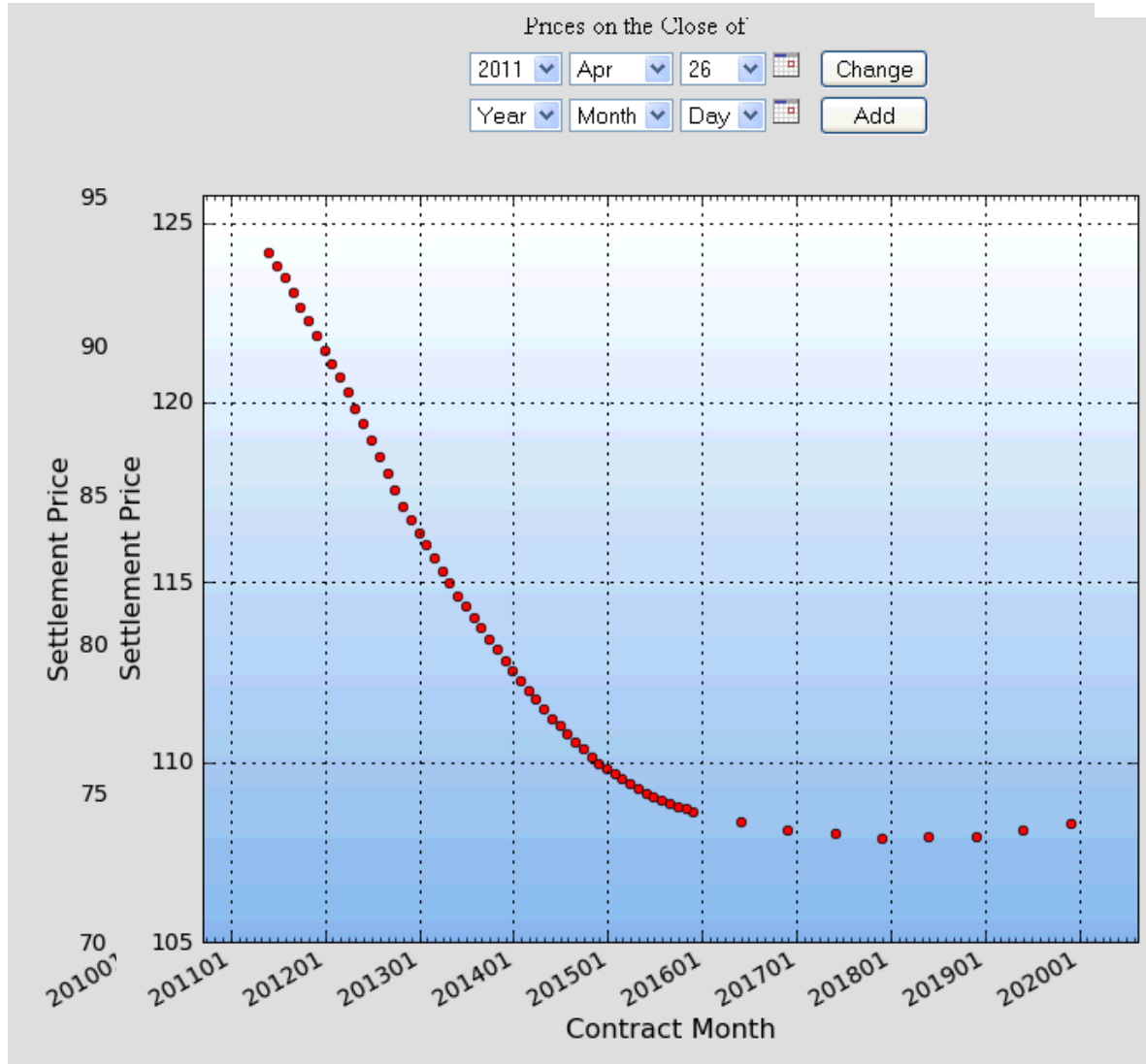
Term Structure 1 July 2010



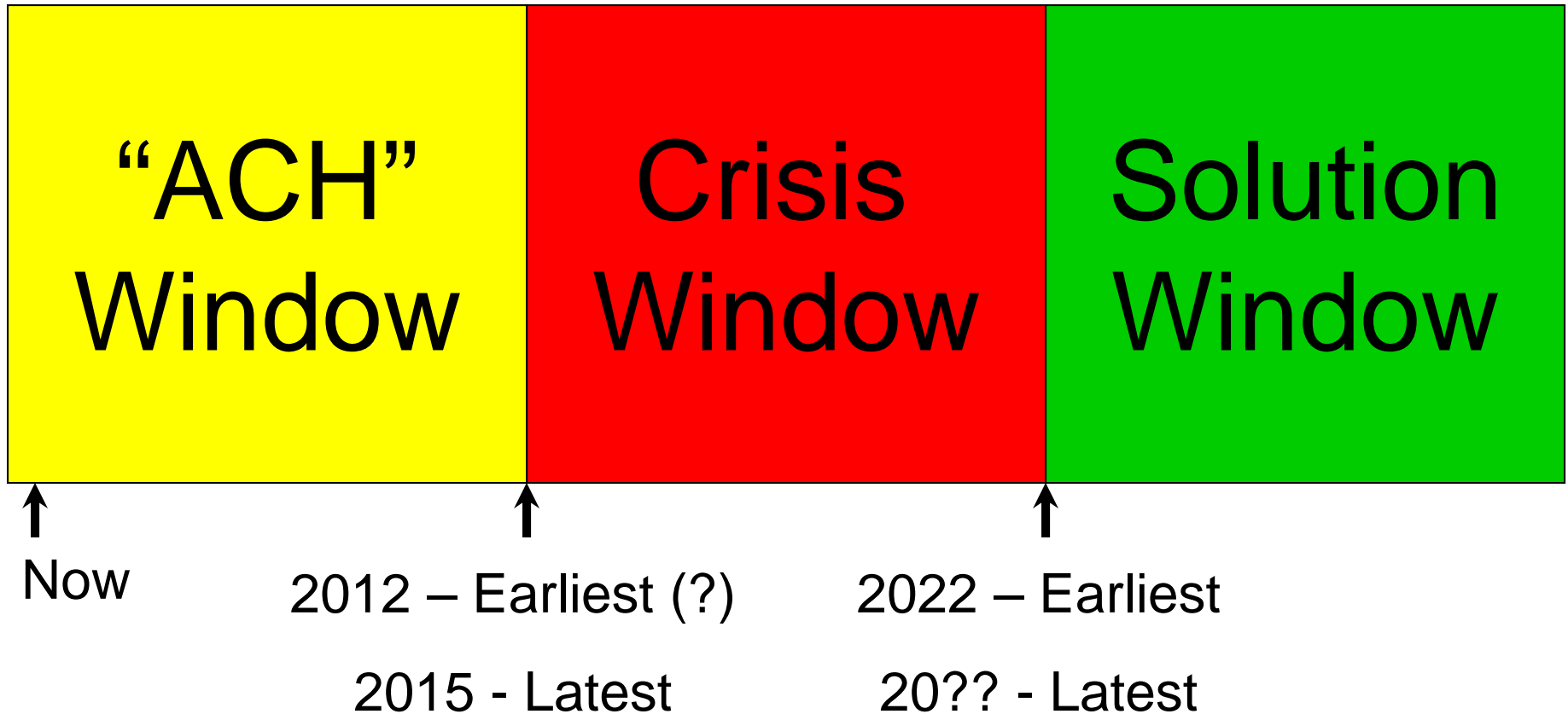
But the market is now in “Backwardation”



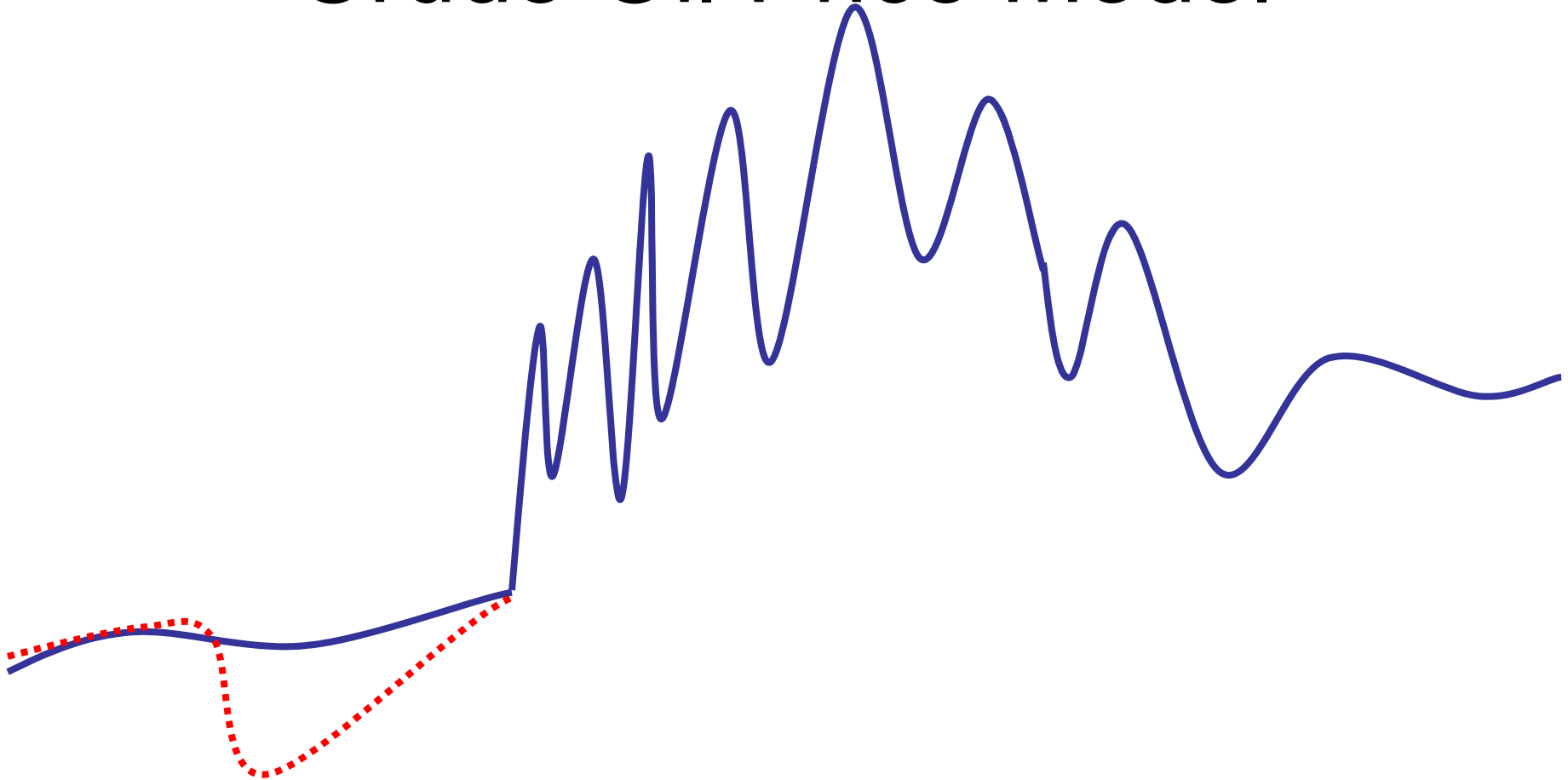
Term Structure: April 26, 2011



Crude Oil Price Timeline



Crude Oil Price Model



“ACH” Window

Crisis Window

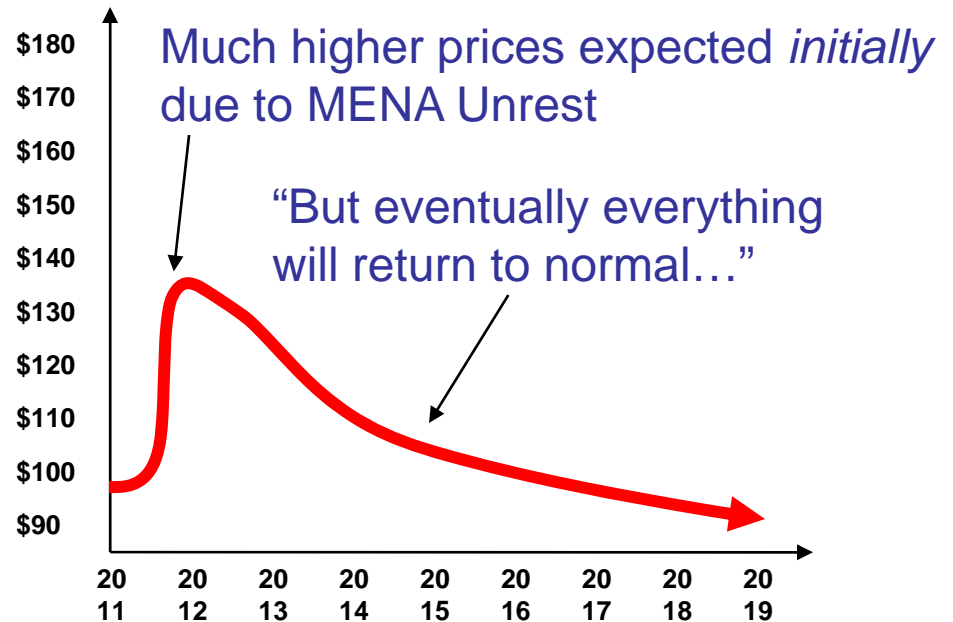
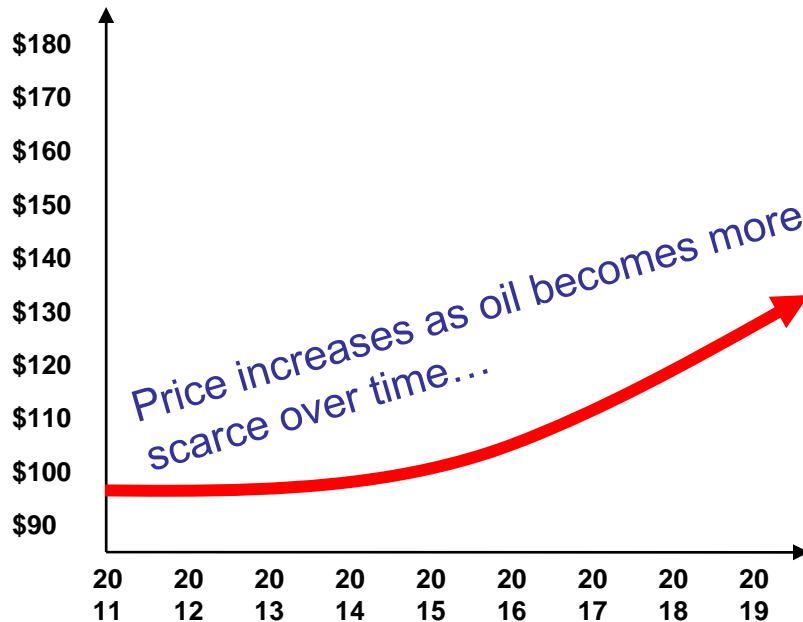
Solution Window

GAME CHANGER

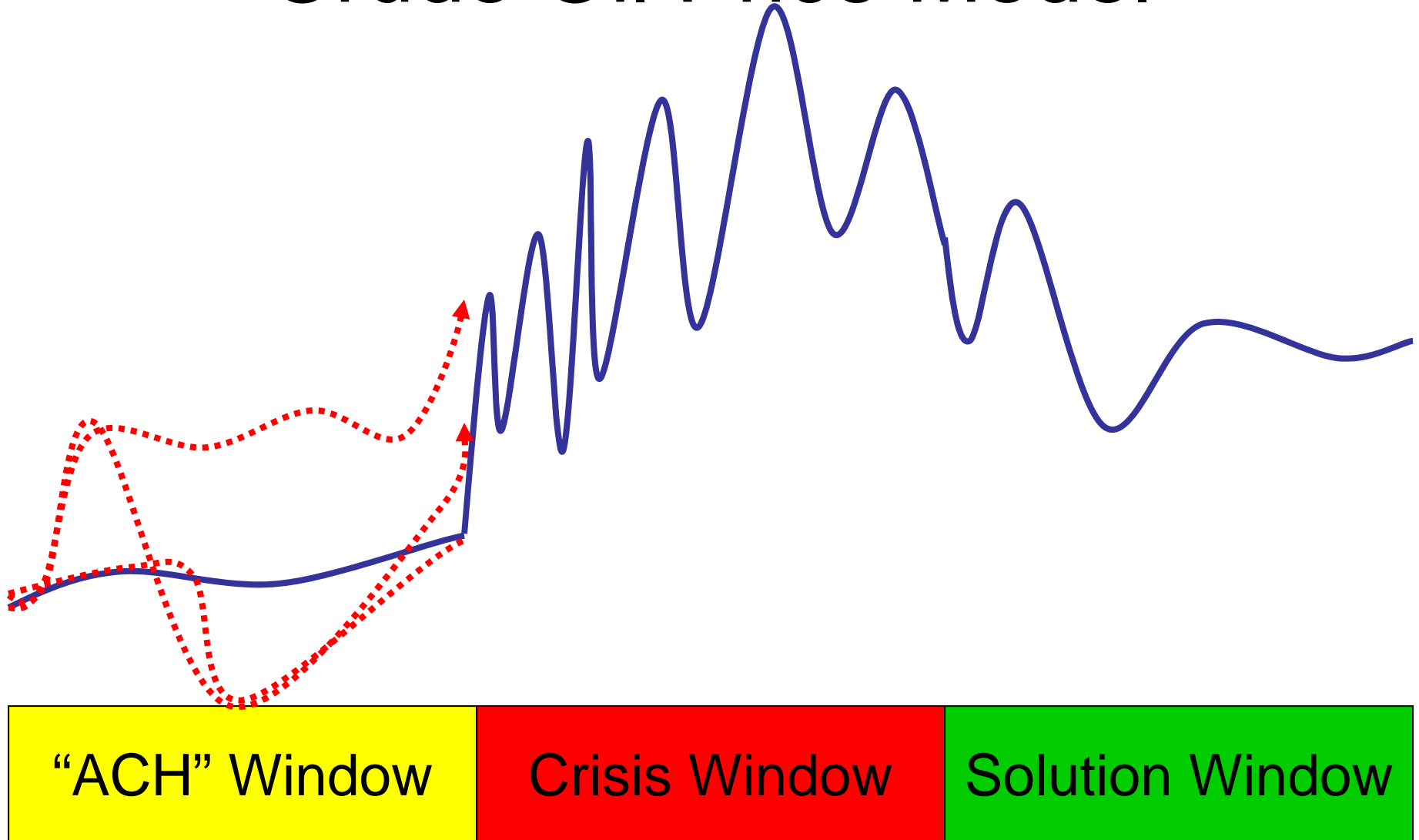


Geological vs. Geopolitical Crises

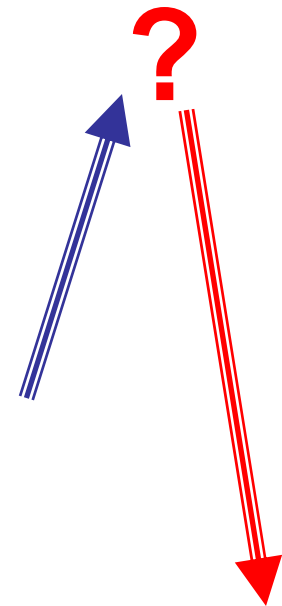
“PEAK OIL” Expectation: “MENA Unrest” Expectation:
Two phenomena merge with complications!



Crude Oil Price Model

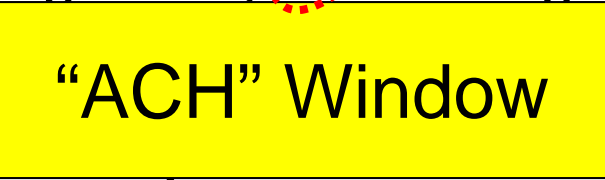


Energy “Ceiling” on the Economy?



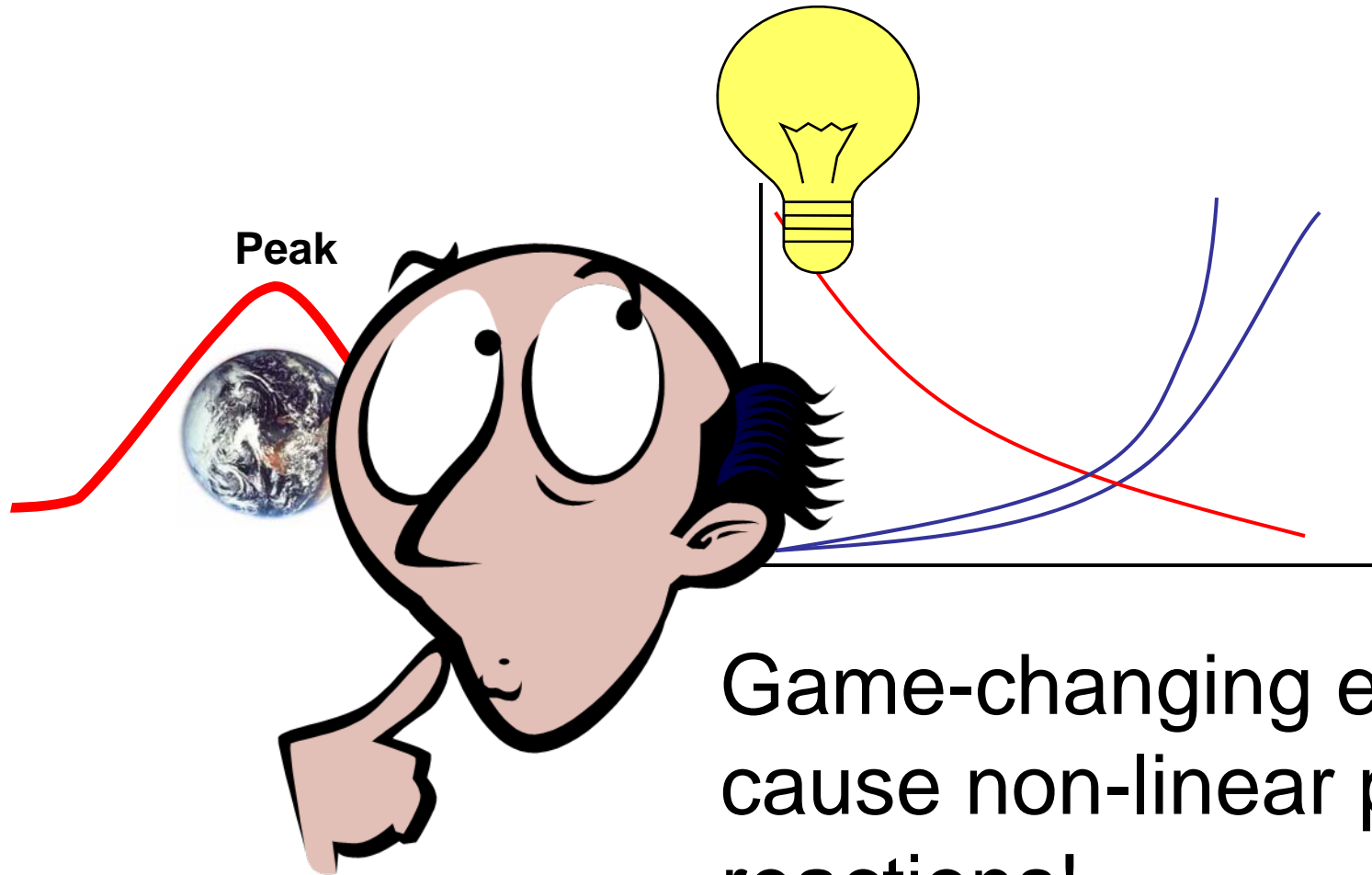
If energy costs contributed to crippling the economy in 2008, could it happen again?

Big Down-Move in ACH Window

- Major economic event crashes crude oil market
 - U.S. Double-Dip Recession
 - European Sovereign Debt Crisis escalates
 - China tightening leads to crash; contagion spreads globally
- Don't think of this as a *potential* risk. Expect it to happen and hedge accordingly!
 - Better yet, engineer your trading strategy to profit when it happens
- I view this as 

How will markets
react when Peak Oil is
widely accepted?

Perceptions vs. Decline Rates

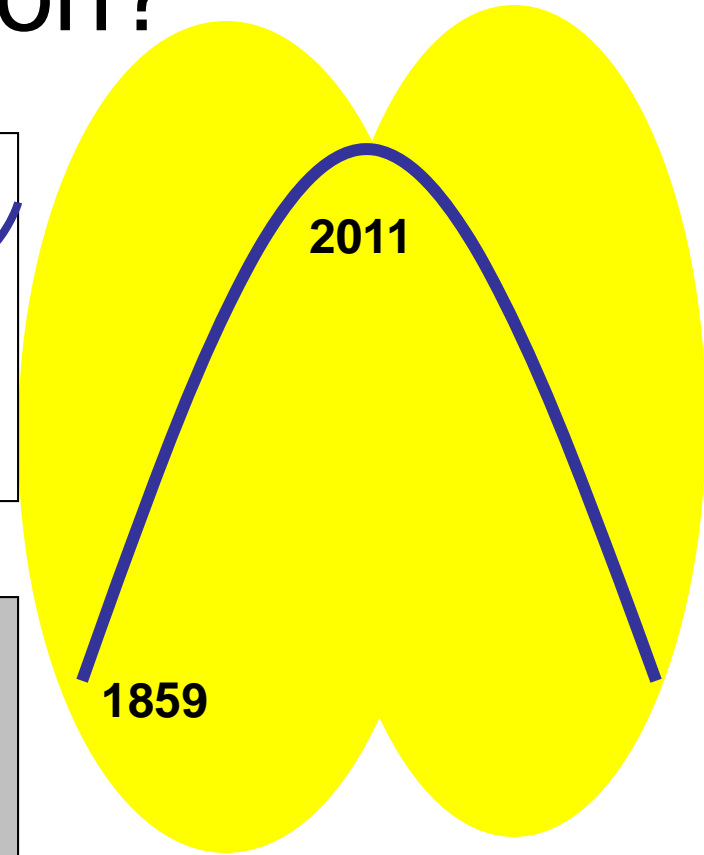
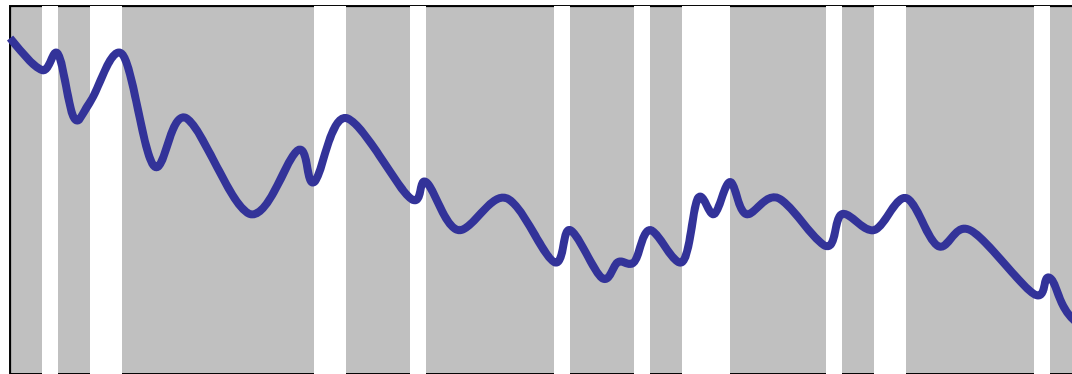
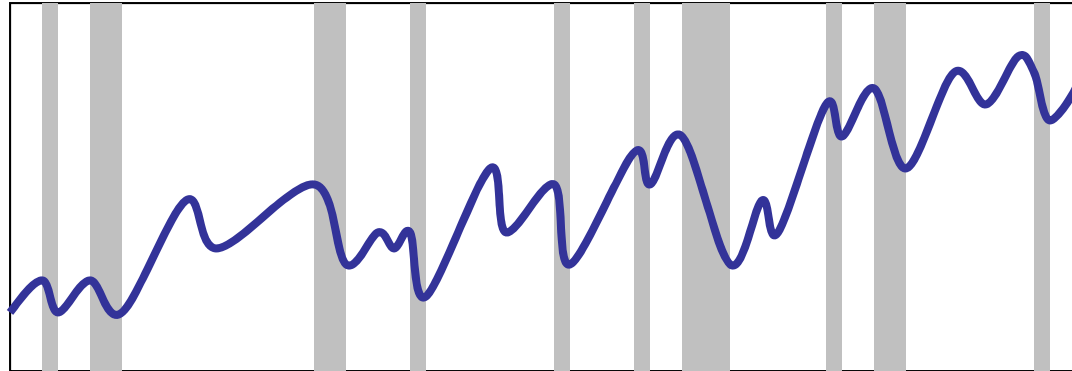


Game-changing events
cause non-linear panic
reactions!

Game Changing Perceptions



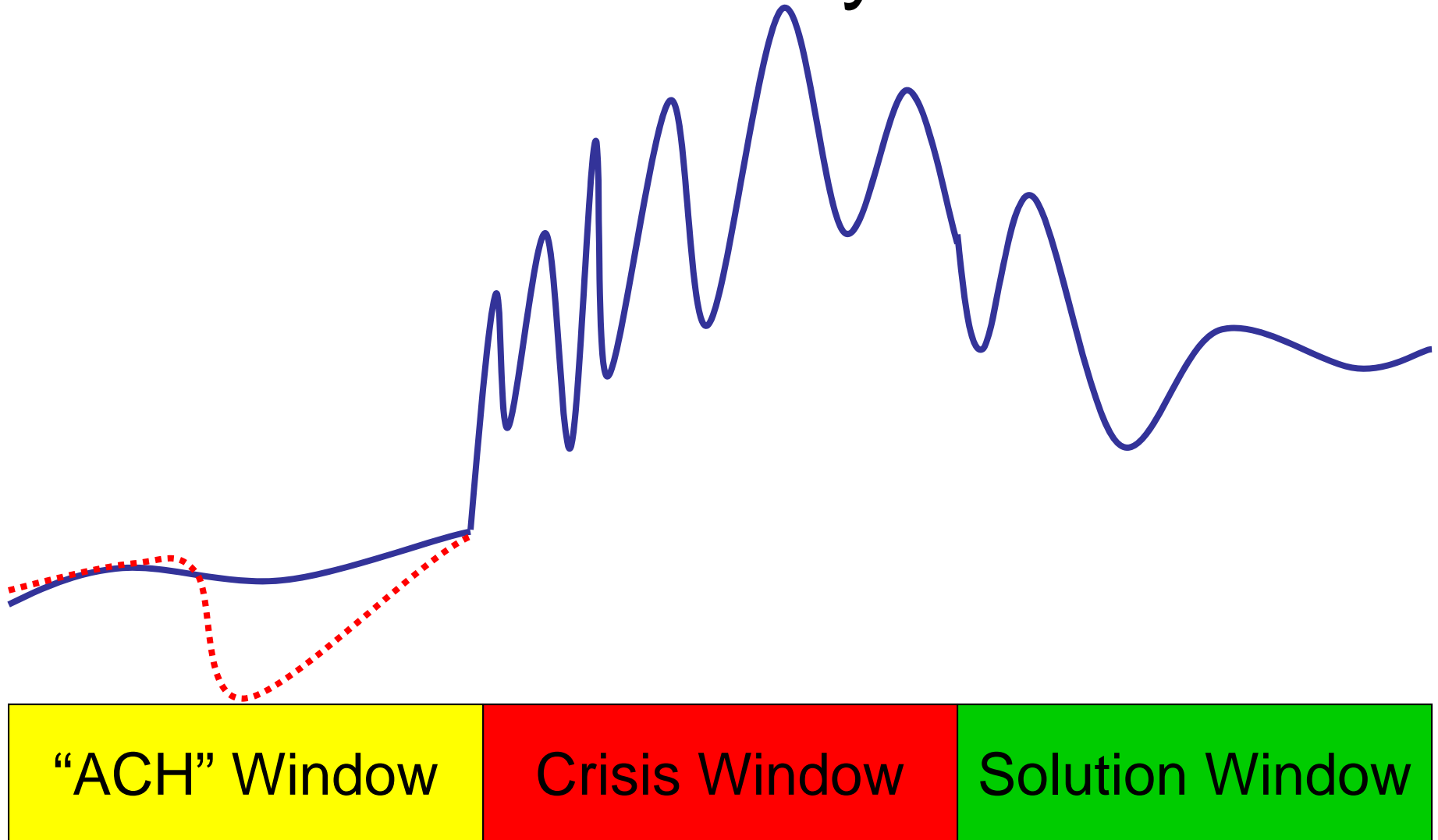
Global Depression until Solution Implementation?



Investment Opportunities

(Very much condensed from the original version – see videos)

Sometimes it Pays to Wait!



Quick Summary of Investment Plays

- Oil & Gas E&P stocks & MLPs
 - Some drawbacks in late crisis window
 - Charley Maxwell likes Cenovus (CVE), Suncor (SU)
- Oil Recovery Technology Stocks
 - Horizontal drilling, enhanced recovery, etc.
- Nuclear: Technology, Construction, Uranium Mining
- Renewables (Wind, Solar, Geothermal)
 - Equities overbought?
 - I still like Geothermal (Magma Energy on a dip)
- Natural Gas
 - E&P stocks & MLPs
 - Marc Faber likes First Trust NG Fund (FCG) and Chesapeake Energy (CHK)

More Investment Thoughts

- NOT RECOMMENDED: Oil & Gas ETFs
 - Constant roll-over of contracts causes tracking error
 - These funds don't perform as well as the underlying commodities
- A really big speculative opportunity is being created by the conflux of MENA Unrest and Peak Oil
 - Unrest risk is pushing term structure into deepening backwardation. Could go parabolic with next price spike.
 - The trade: Buy calendar spreads from early 2012 to 2015/2016 as low as possible. (Wait for price spike to bottom the spread)
 - The backwardation will eventually reverse to contango as Peak Oil is realized.

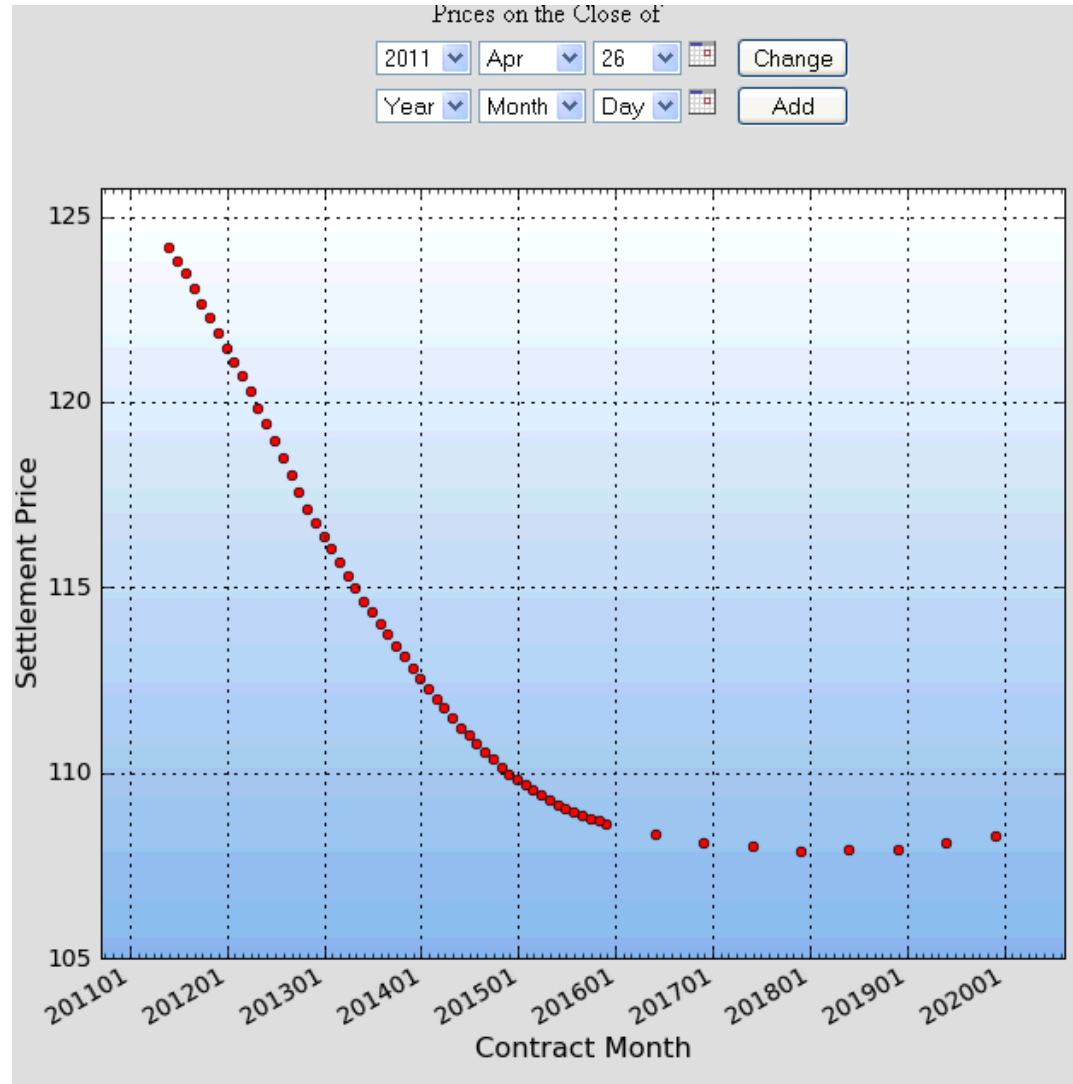
In Closing

A trivia question for the Scientists and Engineers in the audience

- What was the closing price of Brent Crude Oil as of Tuesday (April 26th?)
- \$124?

Brent Crude Oil Futures

Price as of Tuesday April 26, 2011



Where to Learn More

Two free videos present a considerably expanded version of this presentation.

Free download links at
www.ErikTownsend.com