

Sticky Times

Conspiracy or Fundamental

A Collection of Thoughts

Presentation

Where Knowledge Shared is Knowledge Gained

Don't take sides
and have a
plan for every
contingency



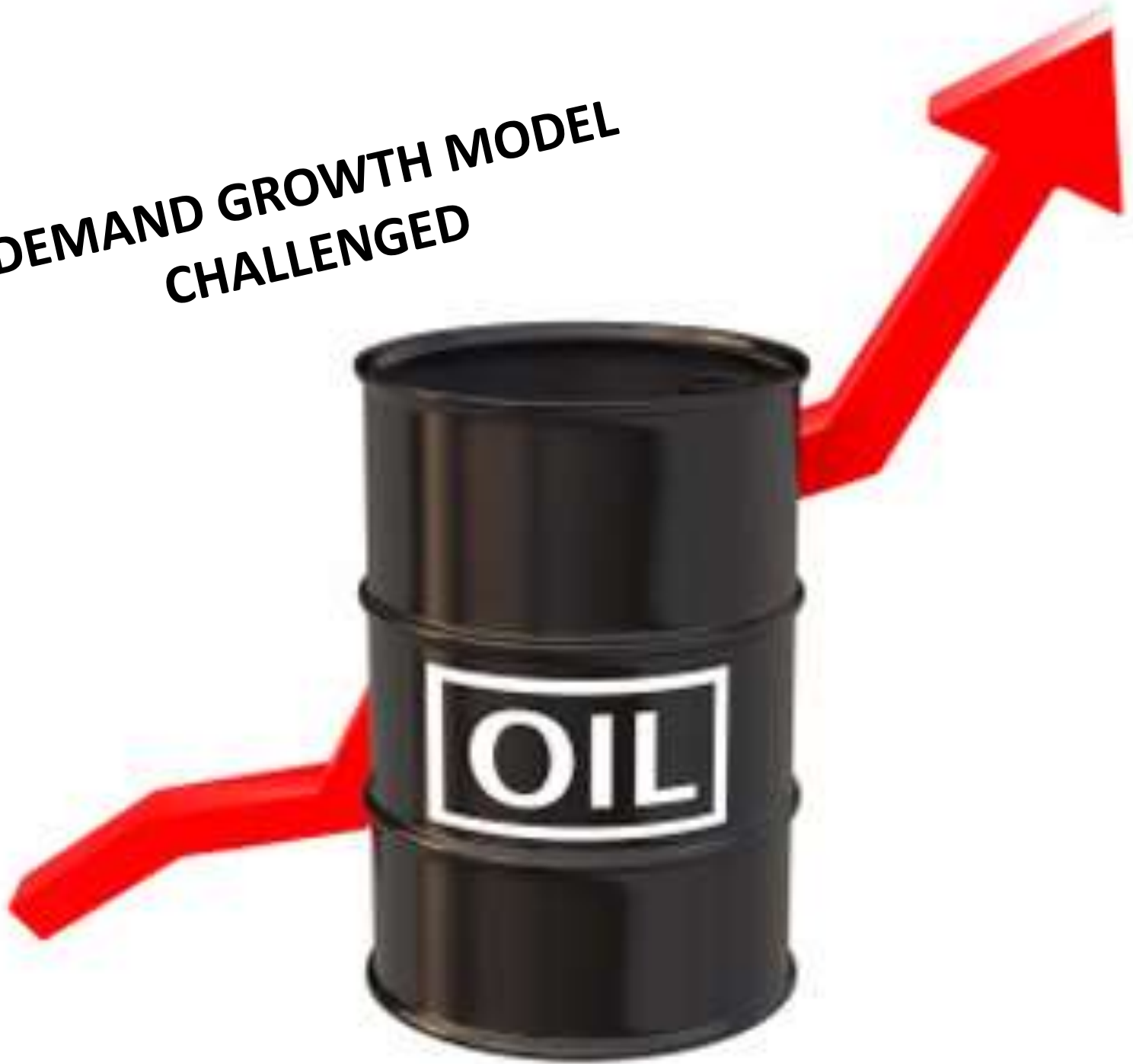
The current slump in oil prices is often portrayed as a straight fight between Saudi Arabia and the North American shale drillers but the real picture is more complicated.

Saudi driving the oil prices down is not the reason for the oil price decline but a consequence of :

- Demand growth model being challenged due to increase cost of production & wages stagnation
- Massive capital misallocation due to Q.E & Chinese stimulus :
 - ZIRP provided cheap financing to Shale Industry
 - Investors chasing high returns invested in Junk Energy Bonds giving returns which A rated instruments gave only few years ago.
- Geopolitical volcano remains mainly dormant
- Currency War – Dollar Power



**DEMAND GROWTH MODEL
CHALLENGED**



Cost of Production Per Barrel

Regions	Dollars per barrel (\$/bbl)
Arctic	115-122
Brazil Ethanol	63-69
Central and South America	29-35
Deepwater Offshore	54-60
EU Biodiesel	106-113
EU Ethanol	98-105
Middle East Onshore	10-17
North Sea	46-53
Oil Sands	89-96
Former Soviet Union Onshore	18-25
Russia Onshore	15-21
US Ethanol	80-87
US Shale Oil	70-77
WAF Offshore	38-44

Wages Stagnation Changed the Oil Price Dynamics

This demand growth view has been challenged lately due to a global economic slowdown along with the rise in the cost of production.

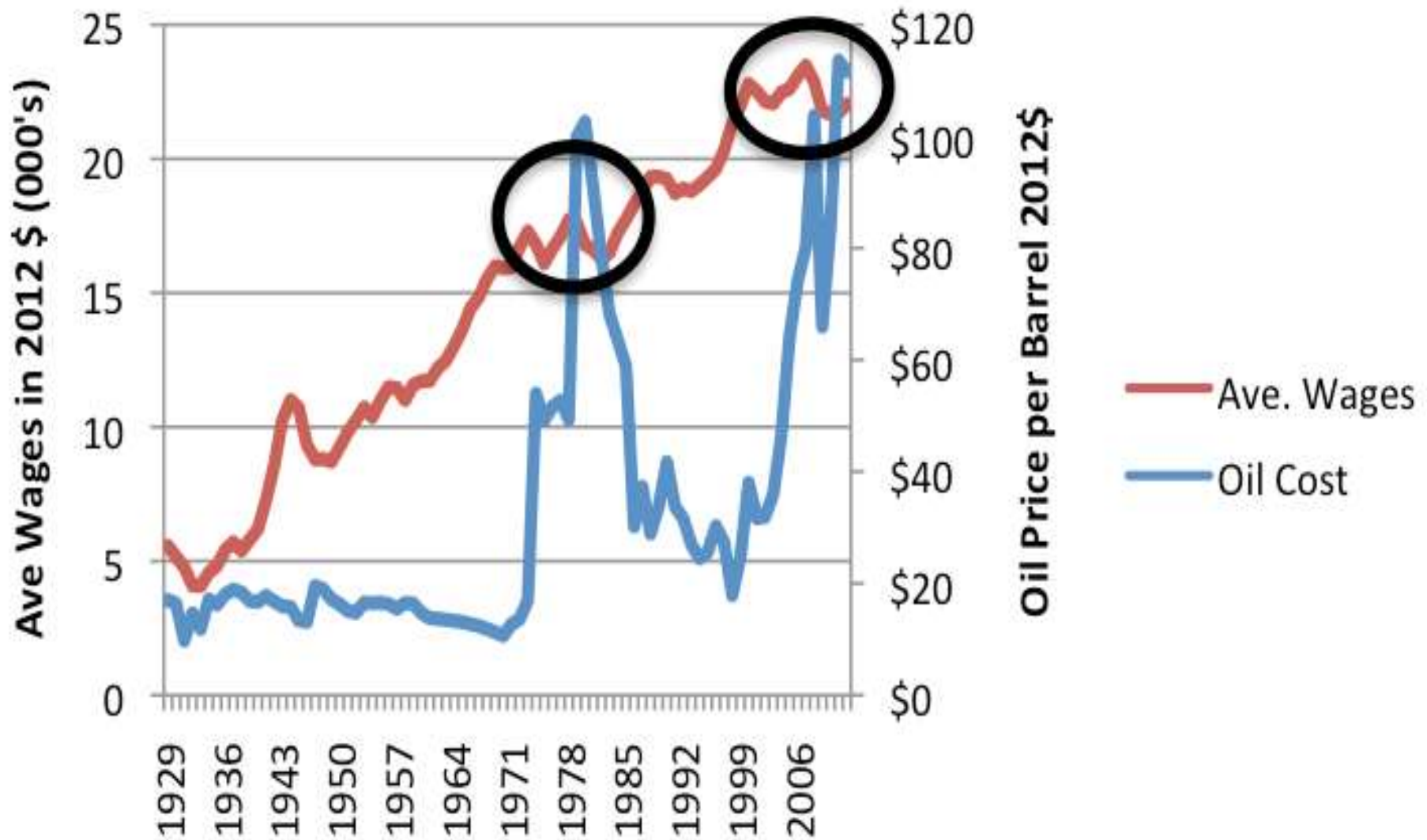
For the listed oil majors while the CAPEX continues to rise the production is declining

For the listed oil majors according to Goldman Sachs costs have outpaced revenues by 2-3% per year.

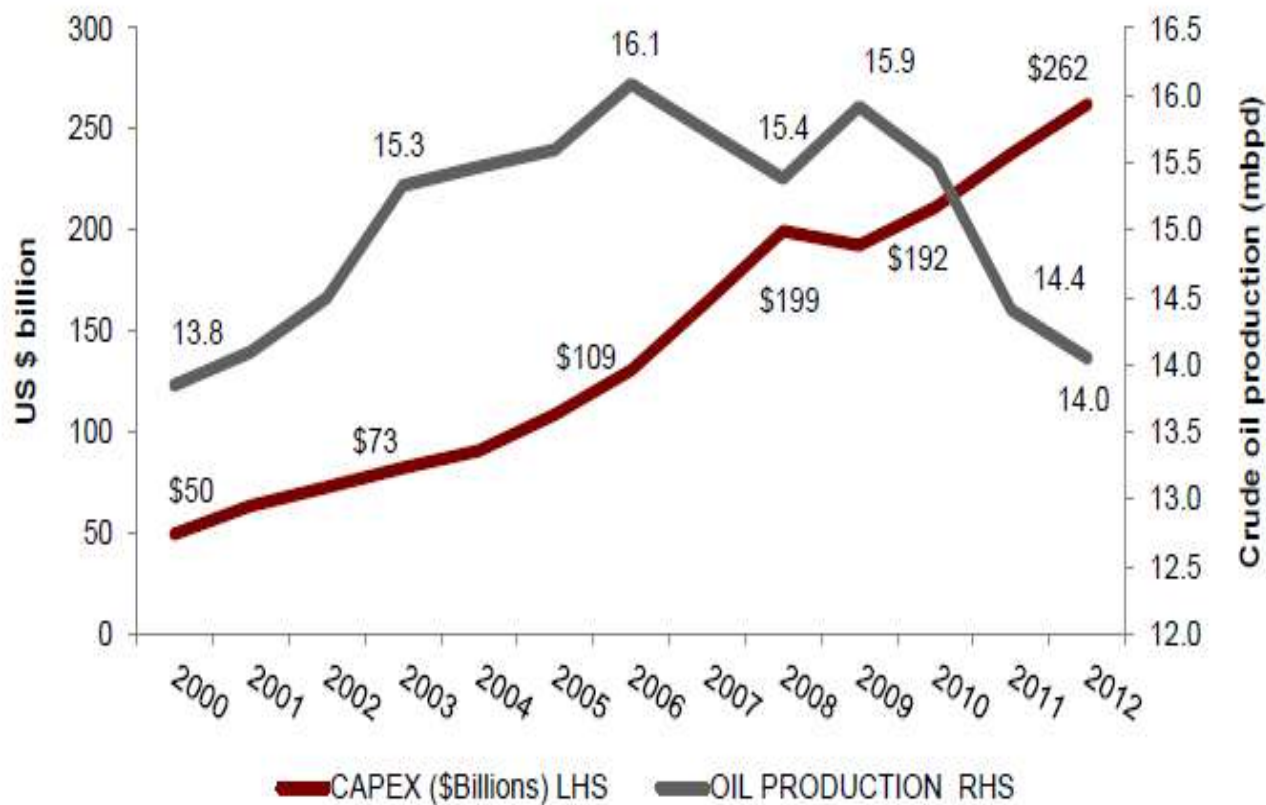
Profitability is down 10-20%. Barclays asserts that Profits have lagged because costs are rising faster than revenues. E&P CAPEX per barrel has been rising nearly 11% per year.

Brent oil price has been largely flat. A number of projects have consequently been deferred, cancelled or returned for re-evaluation.

Average US Wages Compared to Oil Price



Listed Oil Majors: Capex and Crude Oil Production



Crude Oil Production and Capex

Combined data for BG, BP, COP, CVX, ENI, OXY, PBR, RDS, STO, TOT, XOM

Source: Bloomberg via Phibro Trading LLC

Turbulence in the Oil Sector

Chevron puts Rosebank on hold



'Cost overrun' on Castberg



BP's Mad Dog 2 Highlights Big Challenge for Oil Majors

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April 29, 2013 | [Comments \(0\)](#)

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\$43* - Deferred

Oil giant BP (NYSE: [BP](#)) recently announced that it may delay Mad Dog Phase 2, its largest new oil project in the Gulf of Mexico, due to market conditions and industry inflation.

RECS
6
Rec This

Hadrian semisub plan scrapped

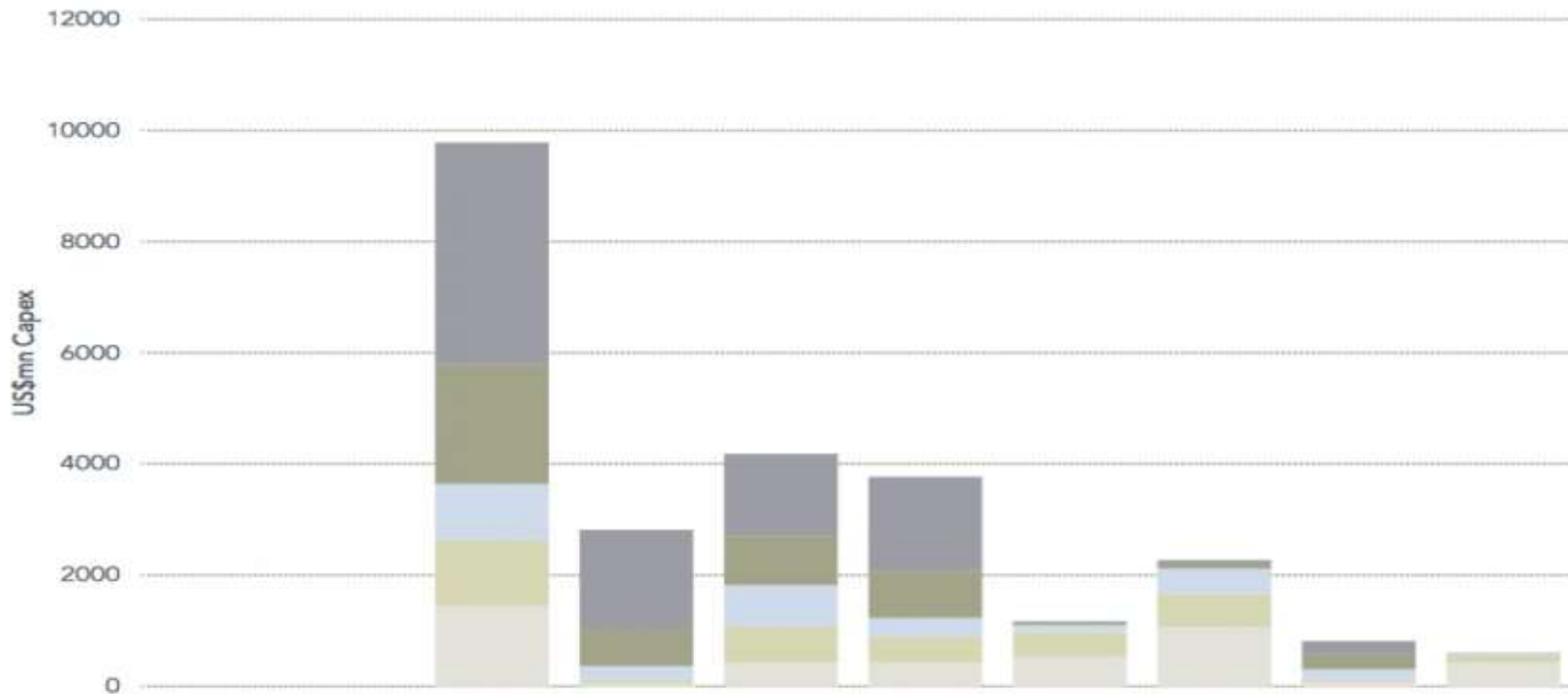


By [Anjan Sreekumar](#) | [More Articles](#) | [Save For Later](#)
ECONOMY: The oil industry is expected to see a 100,000 barrel-per-day floating production semisubmersible for development of the Hadrian North field in the deep-water Gulf of Mexico.

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Breaking Point for Energy Companies – \$ Value of Projects at Risk

Figure 5: Breakeven price band split by oil type 2012–2050



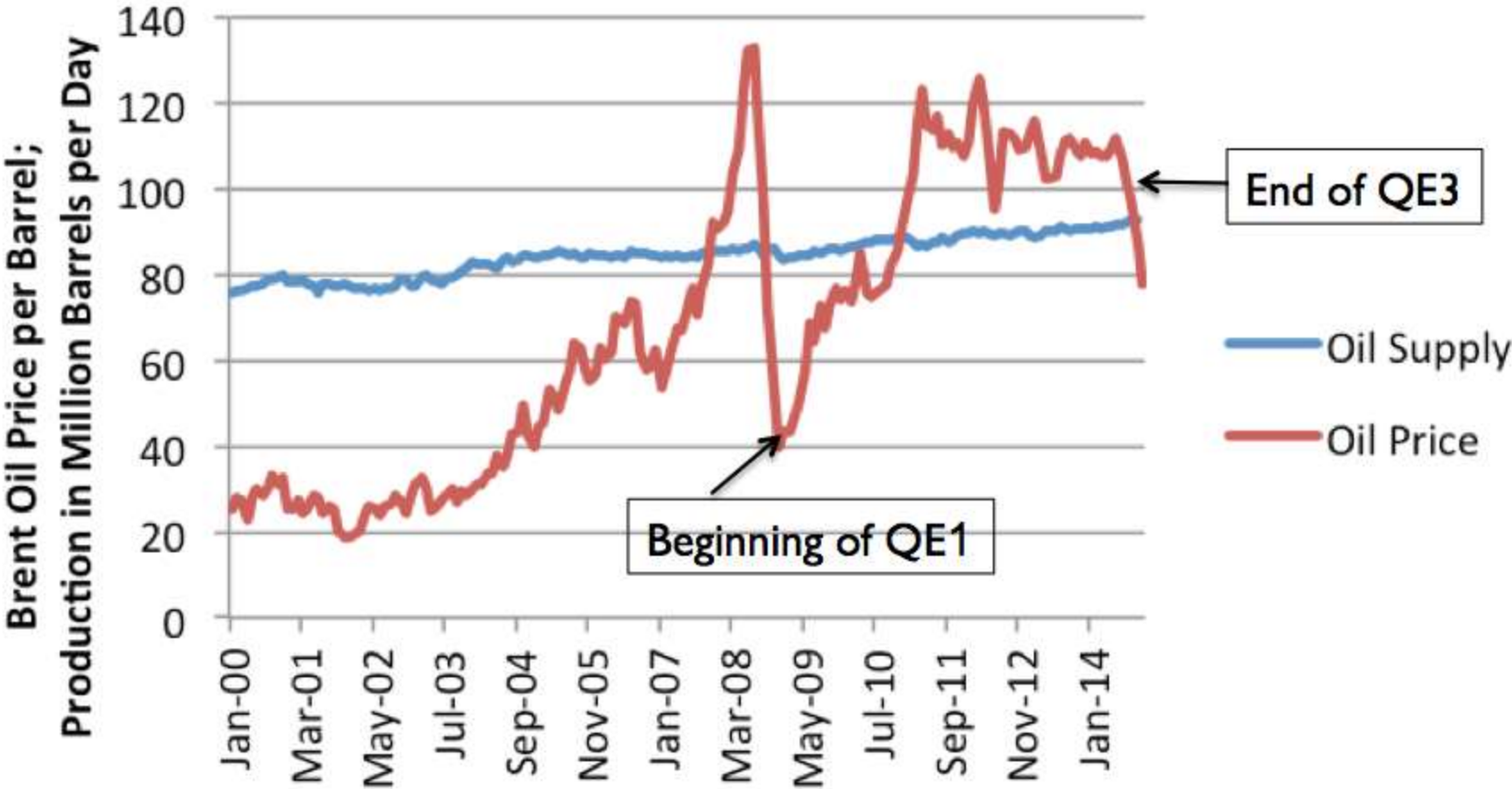
	Conventional	Arctic	Deep water only	Ultra deep water only	Shale oil	Oil sands	Extra heavy oil	Tight liquids
Private above \$150	3970	1793	1466	1685	24	61	233	8
Private \$120–150	2142	646	887	843	48	91	272	9
Private (\$100–200)	1004	255	743	336	122	451	187	23
Private \$80–100	1175	69	639	464	441	601	56	133
Private \$60–80	1472	67	456	451	560	1084	91	456



**END OF QE TRIGGERS OIL
PRICE DECLINE**

End of QE in US triggers oil price decline

World "Liquids" Production and Oil Price



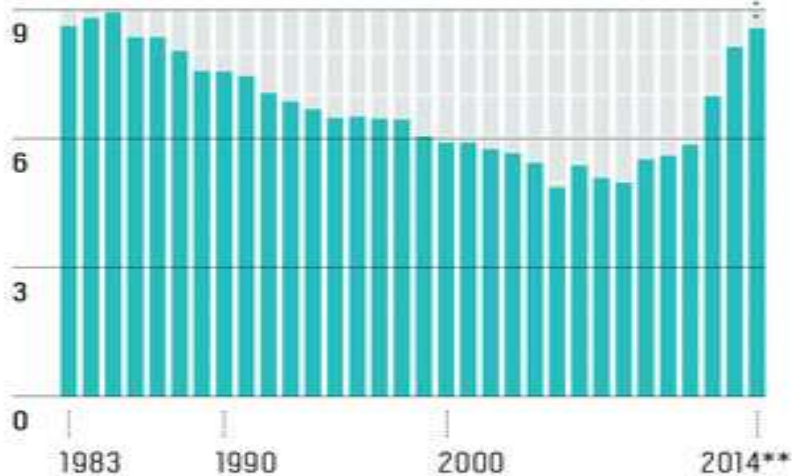
Boom in energy debts due to low interest

BORROWING BOOM

AS THE U.S. STRIVES FOR ENERGY INDEPENDENCE, OIL AND GAS COMPANIES ARE PILING ON DEBT TO KEEP PRODUCTION RISING.

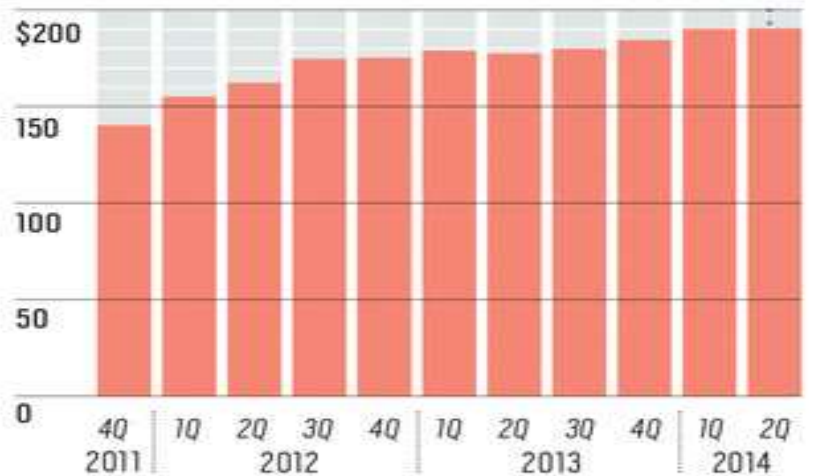
U.S. CRUDE OIL PRODUCTION

(in millions of barrels a day)



TOTAL DEBT OF U.S. OIL AND GAS COMPANIES*

(in billions)



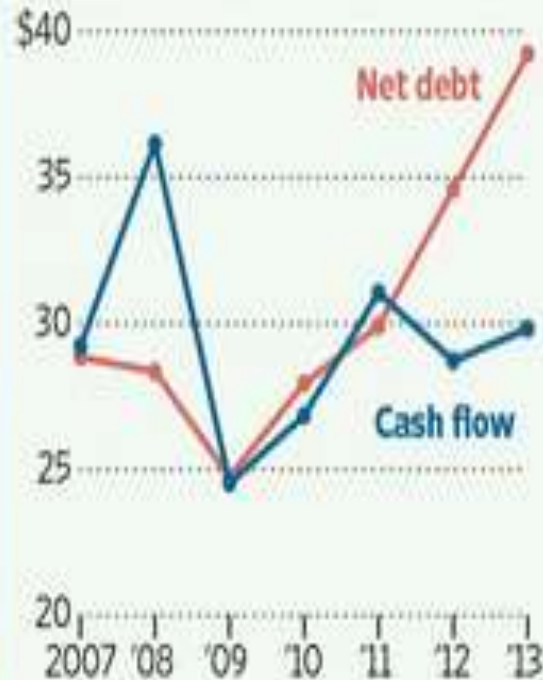
*Excludes six of 60 U.S.-listed firms in the BI North America Independent E&P Valuation Peers Index for which financial data were unavailable for the full period. **As of Aug. 15. Sources: U.S. Energy Information Administration, SEC data compiled by Bloomberg

ZIRP Morphine explodes net debt per barrel

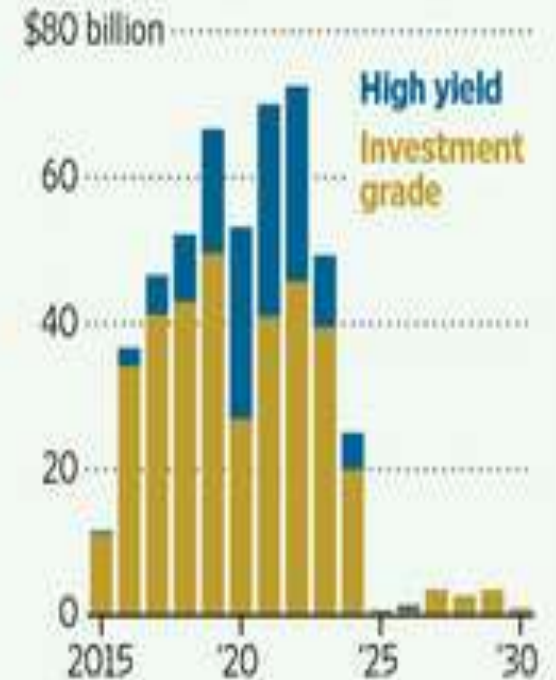


Pump Up the Borrowing

Exploration and production cash flow and net debt per barrel of oil equivalent



Exploration and production debt maturity schedule



Sources: IHS (cash flow, net debt); CreditSights (debt maturity)

The Wall Street Journal

Lower oil price increases the credit risk for shale energy companies



Lower oil price increases the credit risk and raises the cost of financing for shale energy companies

High Yield Returns and Characteristics

	First Half of 2014	Second Half of 2014	Full Year
Broad Market Returns	5.64%	-2.96%	2.51%
Energy Sector Returns	6.27%	-12.90%	-7.44%
Returns ex- Energy	5.53%	-1.14%	4.13%
Broad Market Yields	5.01%	+164 bps	6.65%
Energy Sector Yields	5.03%	+430 bps	9.33%
Yields ex-Energy	5.00%	+121 bps	6.21%
Broad Market Spreads	353 bps	+147 bps	504 bps
Energy Sector Spreads	347 bps	+409 bps	756 bps
Spreads ex-Energy	354 bps	+109 bps	463 bps

* high yield market characteristic, performance, pricing is sourced for BaML Index group as of 12/31/14.

Worsening Total Debts / EBITDA– How long can it last ?

Company Name	Exchange/Ticket	Total Debt/EBITDA	Market Cap	Total Debt	LTM EBITDA
Cheniere Energy Partners LP.	AMEX:CQP	44.7x	9,762	6,590	147
Eclipse Resources Corporation	NYSE:ECR	11.6x	1,090	389	34
The Laclede Group, Inc.	NYSE:LG	8.6x	2,258	2,138	250
Peabody Energy Corp.	NYSE:BTU	7.8x	2,356	6,002	774
Macquarie Infrastructure Company	NYSE:MIC	7.4x	4,668	1,010	137
Eagle Rock Energy Partners, L.P.	NasdaqGS:EROC	7.1x	387	1,261	178
Southcross Energy Partners, L.P.	NYSE:SXE	6.8x	667	268	39
South Jersey Industries, Inc.	NYSE:SJI	6.4x	1,968	1,083	170
Genesis Energy LP	NYSE:GEL	6.3x	3,590	1,284	204
Ferrelgas Partners LP	NYSE:FGP	6.1x	2,178	1,458	240
EV Energy Partners LP	NasdaqGS:EVEP	6.0x	1,155	980	162
NGL Energy Partners LP	NYSE:NGL	5.9x	2,502	1,637	278
Ashland Inc.	NYSE:ASH	5.7x	8,172	3,280	580
Spectra Energy Corp.	NYSE:SE	5.6x	24,411	14,723	2,642
ONEOK Inc.	NYSE:OKE	5.4x	10,081	8,330	1,539
Kinder Morgan, Inc.	NYSE:KMI	5.4x	85,365	36,309	6,729
Williams Companies, Inc.	NYSE:WMB	5.3x	35,303	11,579	2,169
Dominion Resources, Inc.	NYSE:D	5.2x	42,339	23,033	4,393
Access Midstream Partners, L.P.	NYSE:ACMP	5.2x	11,274	3,249	624
Energy Transfer Equity, L.P.	NYSE:ETE	5.2x	29,085	23,199	4,476
Crestwood Midstream Partners LP	NYSE:CMLP	5.2x	3,171	1,876	364
Nuveira Environmental Solutions, Inc.	NYSE:NES	5.2x	201	555	108
Crestwood Equity Partners LP	NYSE:CEQP	5.1x	1,237	2,271	449
NiSource Inc.	NYSE:NI	5.1x	13,225	8,834	1,746
Buckeye Partners, L.P.	NYSE:BPL	5.0x	9,926	3,349	669

Lower oil price & rising finance cost impacting production growth

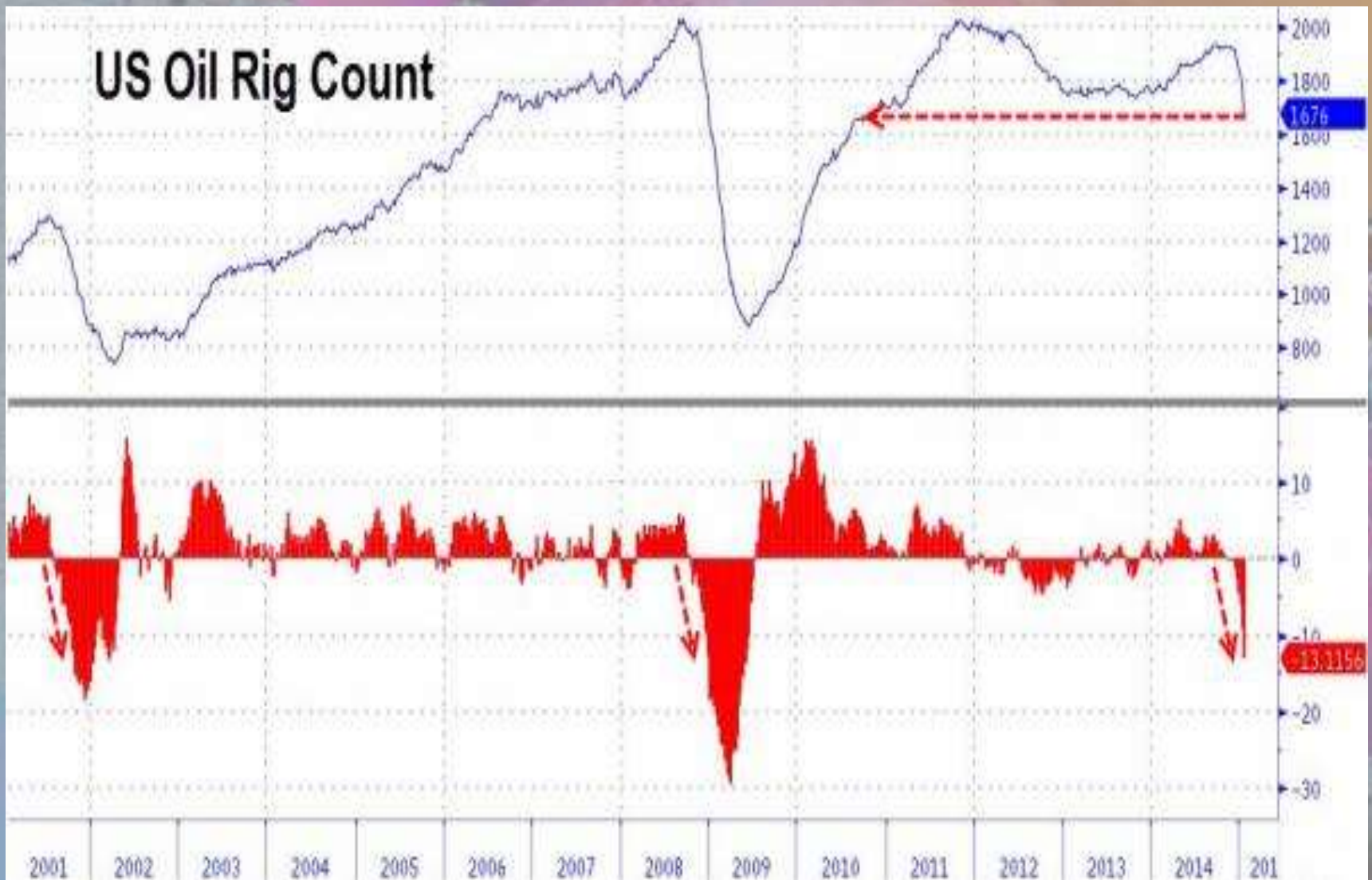
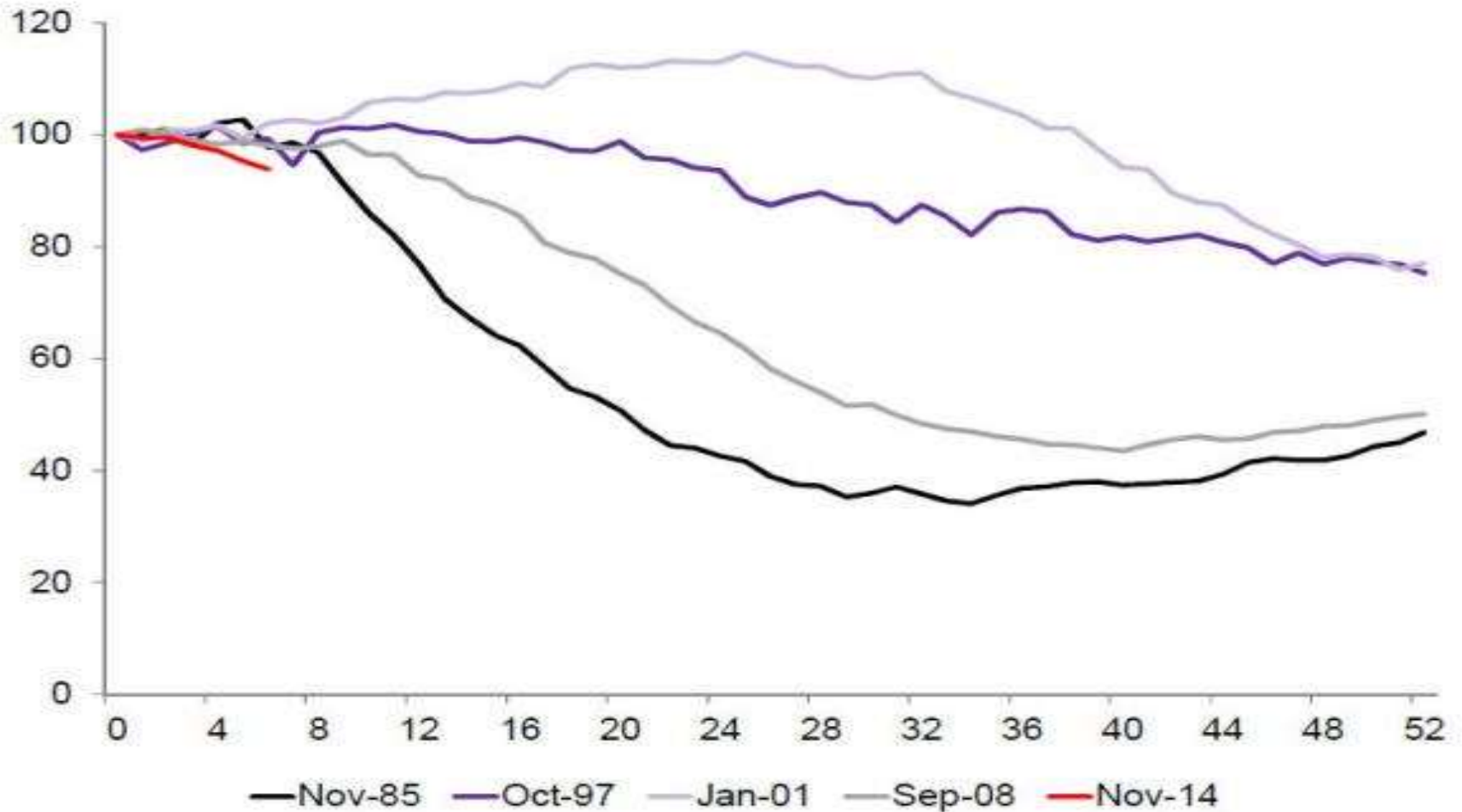


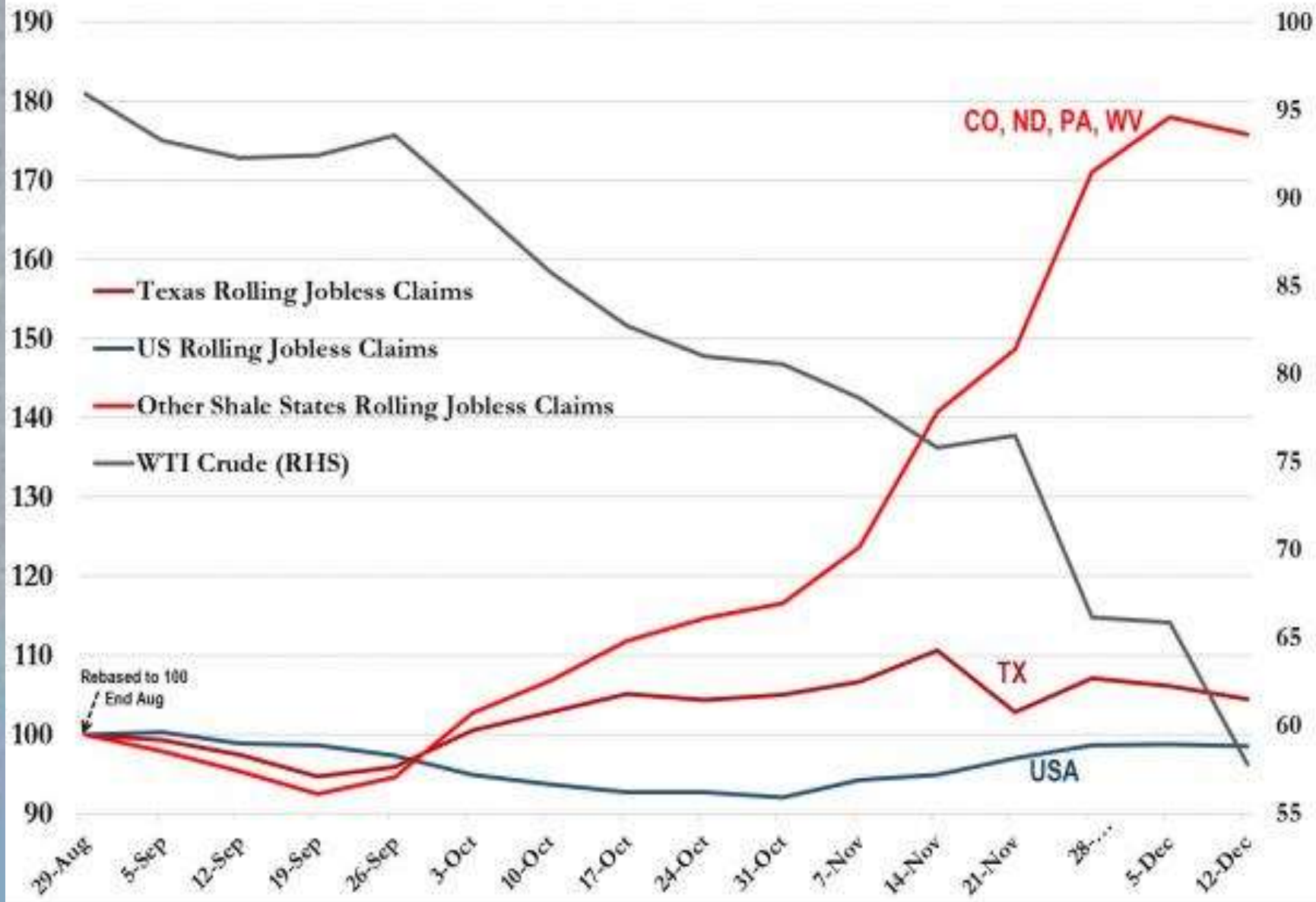
Exhibit 3: The US rig count drop is faster and larger than in any other bear market

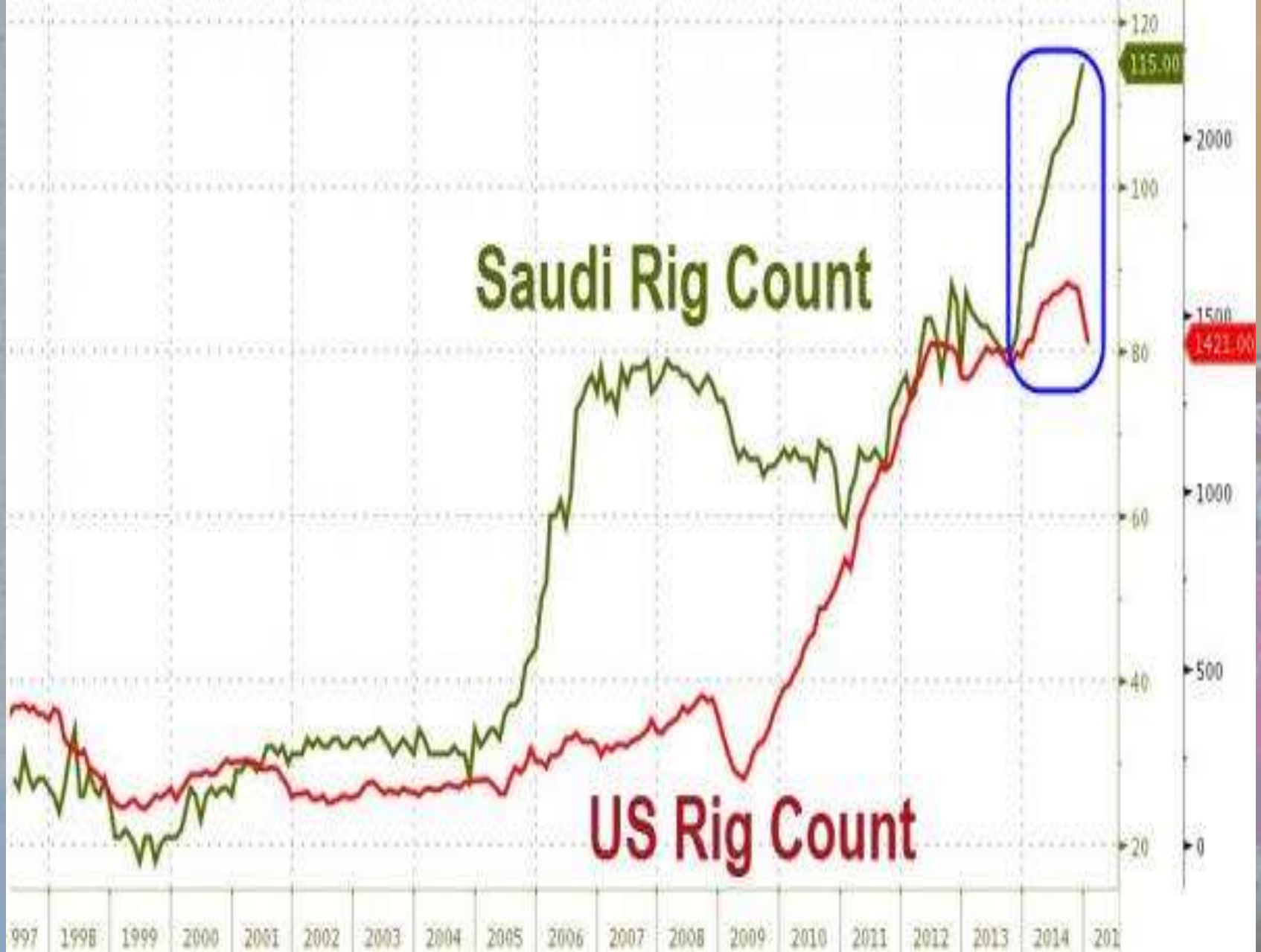
Indexed US oil rig count (100 as of peak) vs. weeks from peak



Source: Baker Hughes.

US Jobless Claims Vs Oil Price





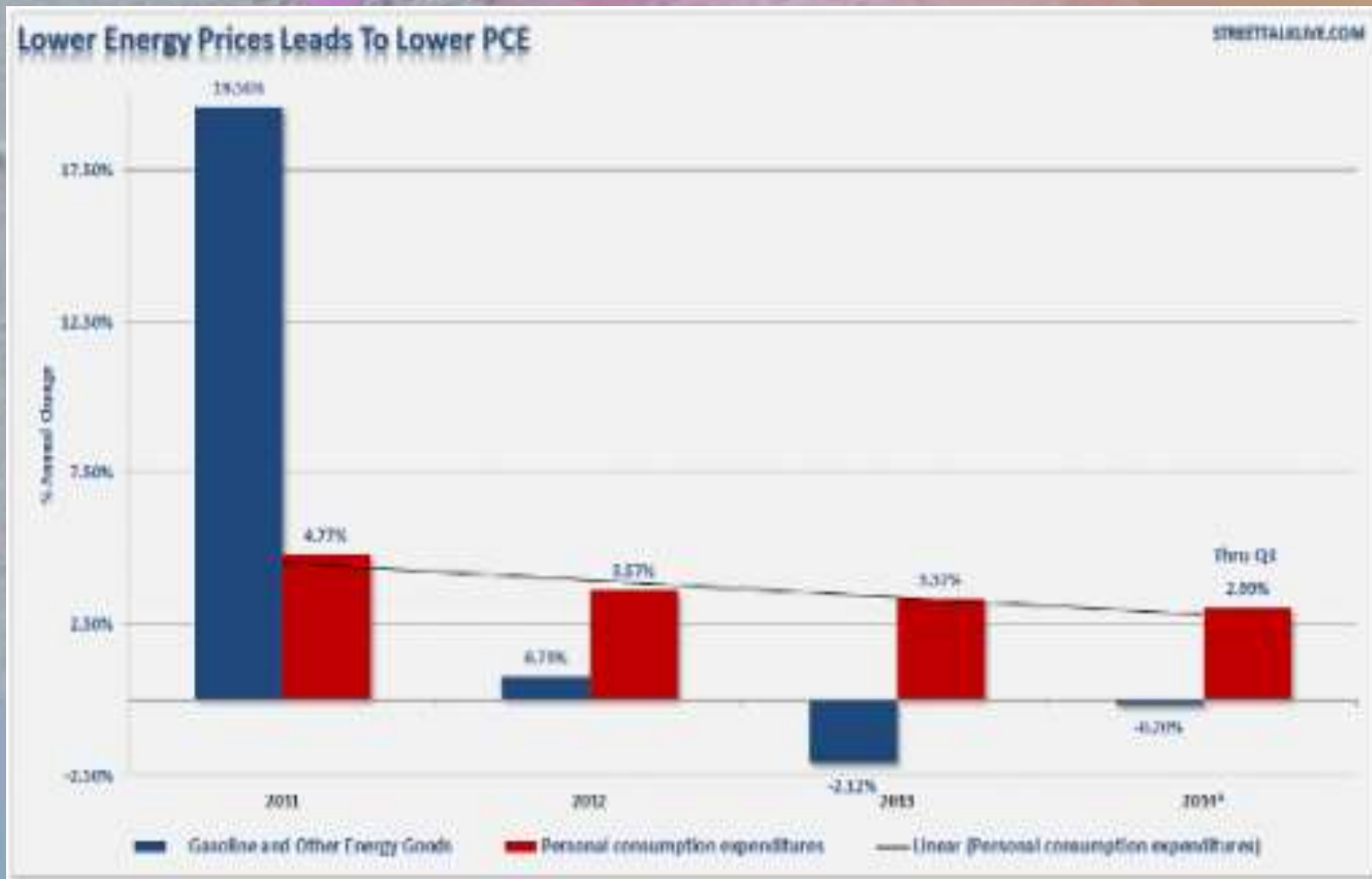
Recent cuts in Oil Industry due to low oil prices

1. U.S. oil rig count is projected to decline by 15% in the first quarter of 2015 alone. And when there are less rigs operating, less workers are needed.
2. Only Last week, 55 more rigs were shut down. That was the largest single week decline in the United States in 24 years.
3. Oilfield services provider Baker Hughes has announced that it plans to lay off 7000 jobs
4. Schlumberger, a big player in the energy industry, has announced plans to get rid of 9000 workers
5. Suncor Energy is eliminating 1000 jobs from their oil projects up in Canada.
6. Halliburton's energy industry operations have slowed down dramatically, so they gave pink slips to 1000 employees last month.
7. Diamondback Energy just slashed their capital expenditure budget 40 %t to just \$ 450 million
8. Elevation Resources plans to cut their capital expenditure budget from \$227 million to \$ 100 million
9. Concho Resources says that it plans to reduce the number of rigs that it is operating from 35 to 25
10. Tullow Oil has reduced their exploration budget from approximately a billion dollars to about \$ 200 million
11. Henry Resources President Danny Campbell has announced that his company is reducing activity by 40%
12. The Federal Reserve Bank of Dallas is projecting that 140,000 related to the energy industry will be lost in the state of Texas alone during 2015.

USA Economic Stress – Media Talk

- “Texas is in danger of a recession”, CNN Money.
- “Texas Could Be Headed for an Oil-Fuelled Recession,” JP Morgan Economist
- “Good Times” from Texas to North Dakota May Turn Bad on Oil-Price Drop”, Bloomberg
- “Low Oil Prices in the New Year are stressing Petro states”, Vice News
- “Top US Oil States Are Taking A Hit From Plunging Crude Prices”, Business Insider

Do lower energy prices lead to higher Personal Consumption. Is this the new mantra after the QE !



U.S. STRATEGIC PETROLEUM RESERVE

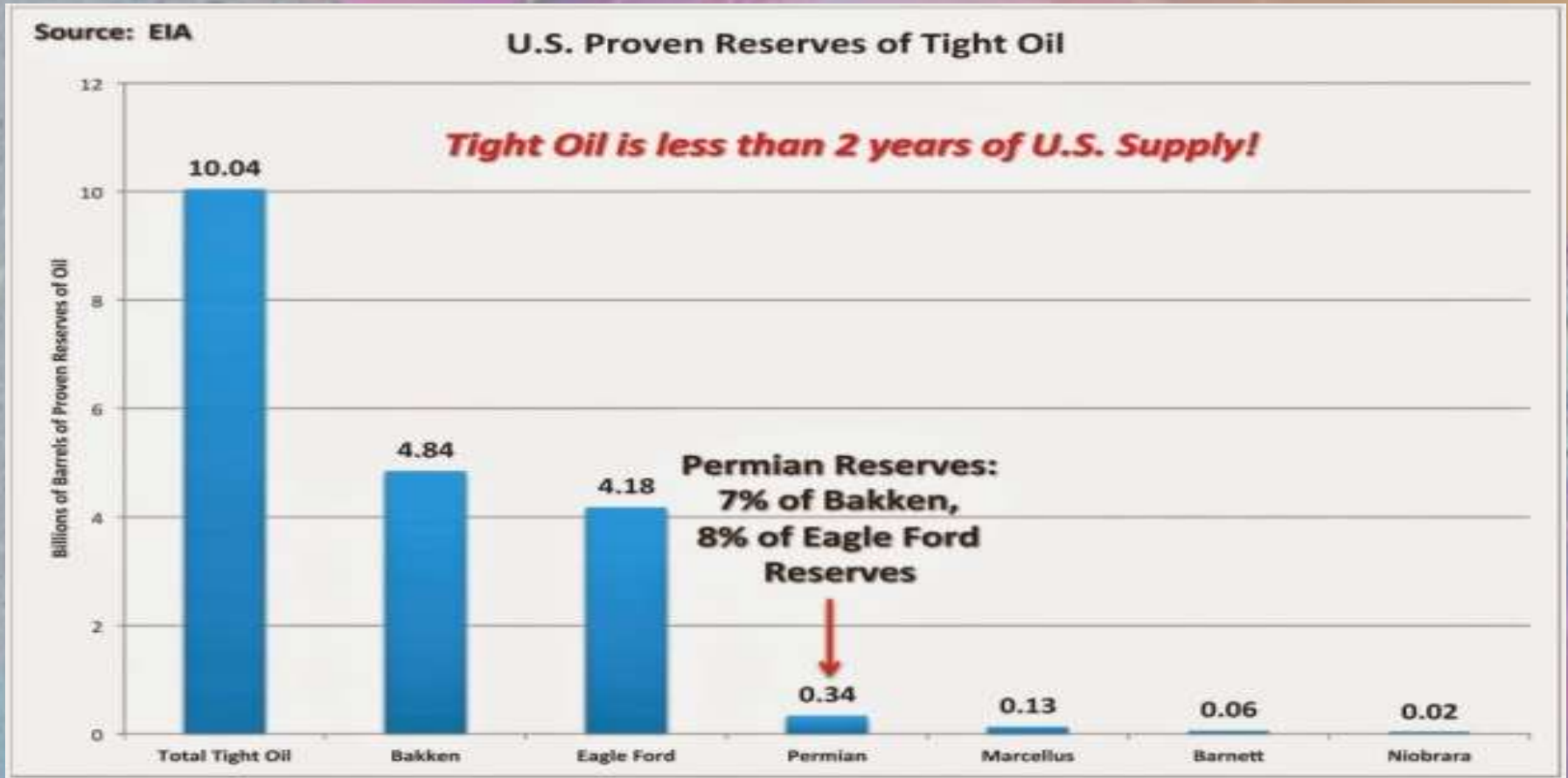
RESERVES MATTER



DRILL,
BABY,
DRILL!

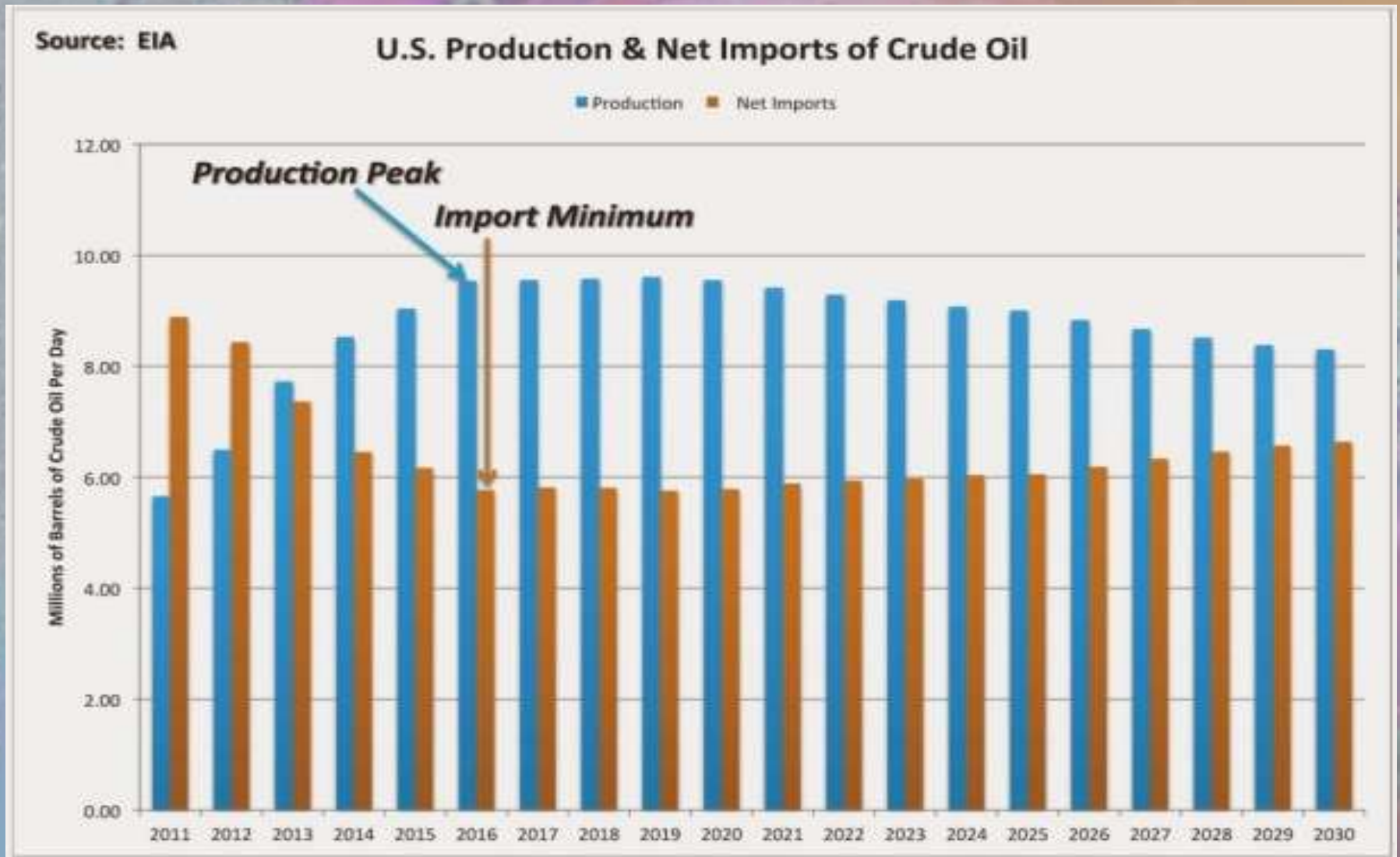


US shale oil reserves - How long can they last

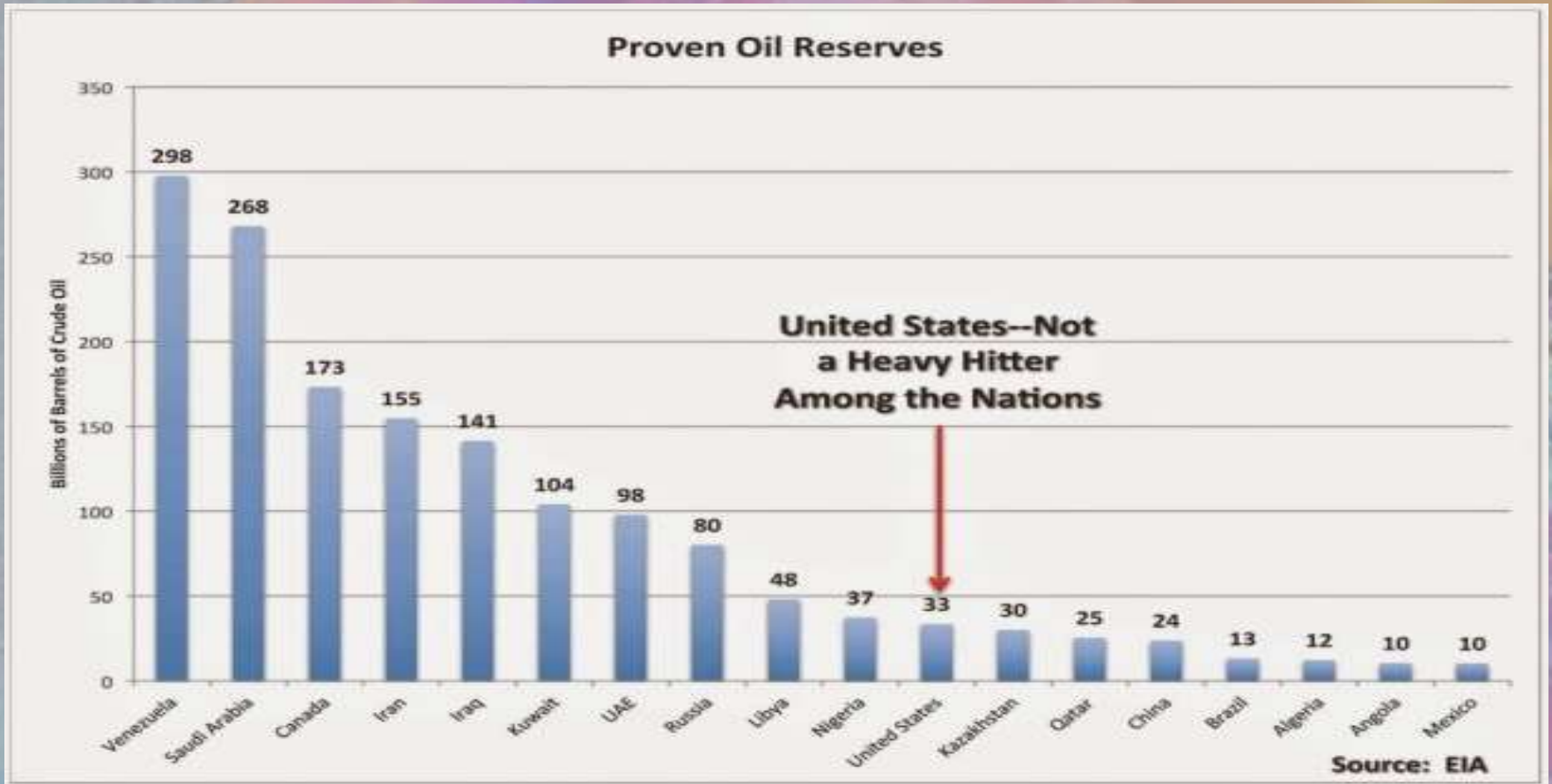


Total tight oil reserves are 10 billion barrels (including condensate). The U.S. consumes about 5.5 billion barrels per year, so that's less than 2 years of supply. Almost all of it is from two players--the Bakken and Eagle Ford shales.

Does it make sense for US to export oil in long run



Reserves Strength



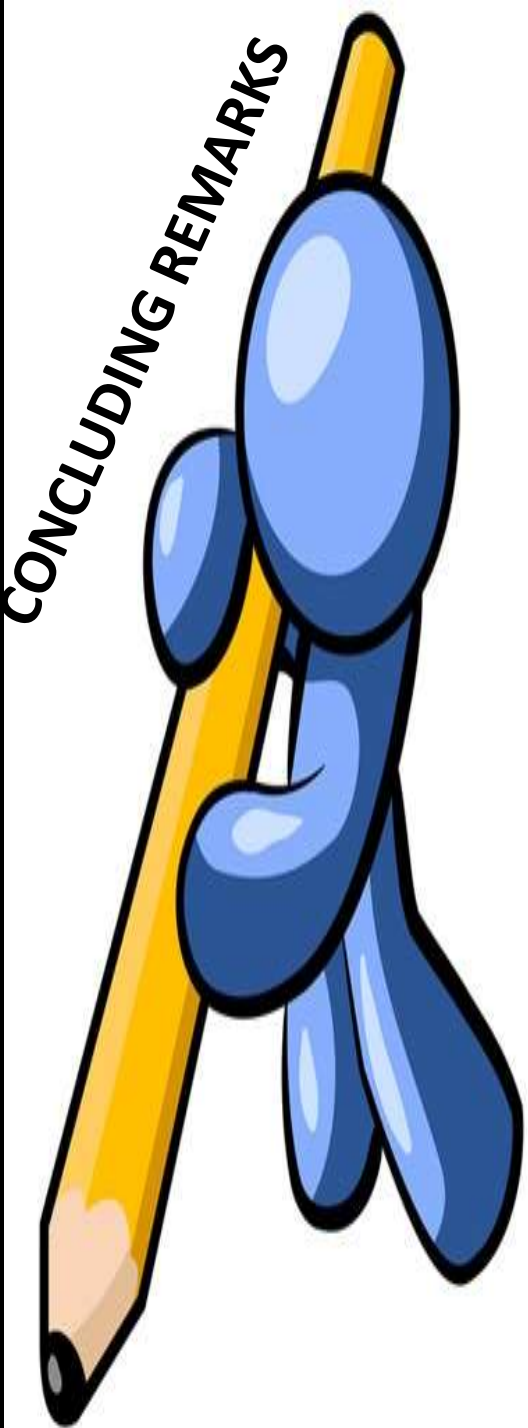
The U.S. is unlikely to be oil self-sufficient in long run.
US is likely to continue to import 6 million barrels of oil per day.
U.S. total production appears to be peaking in a few years and imports will increase.
The U.S. is a relatively minor reserve holder in the world.

DOLLAR POWER & OIL PRICE



Impact of dollar power cant be more obvious





- Oil prices stress started in 2013 with oil majors cutting CAPEX as they were simply not able to pass the high cost of production to consumers .
- Q.E and China stimulus kept the party going for a while.
- Geopolitical volcano remained mainly dormant
- Currency War strengthened the dollar.
- Current low prices under the increasing cost of CAPEX shall be a deterrent to debts which is vital for future growth in oil production
- Population growth and automation requires more fossil fuel therefore price will have to rise to ensure future growth in production.
- Shale Oil will act as CAP and Saudis will be the COLLAR for the Oil Prices going forward.