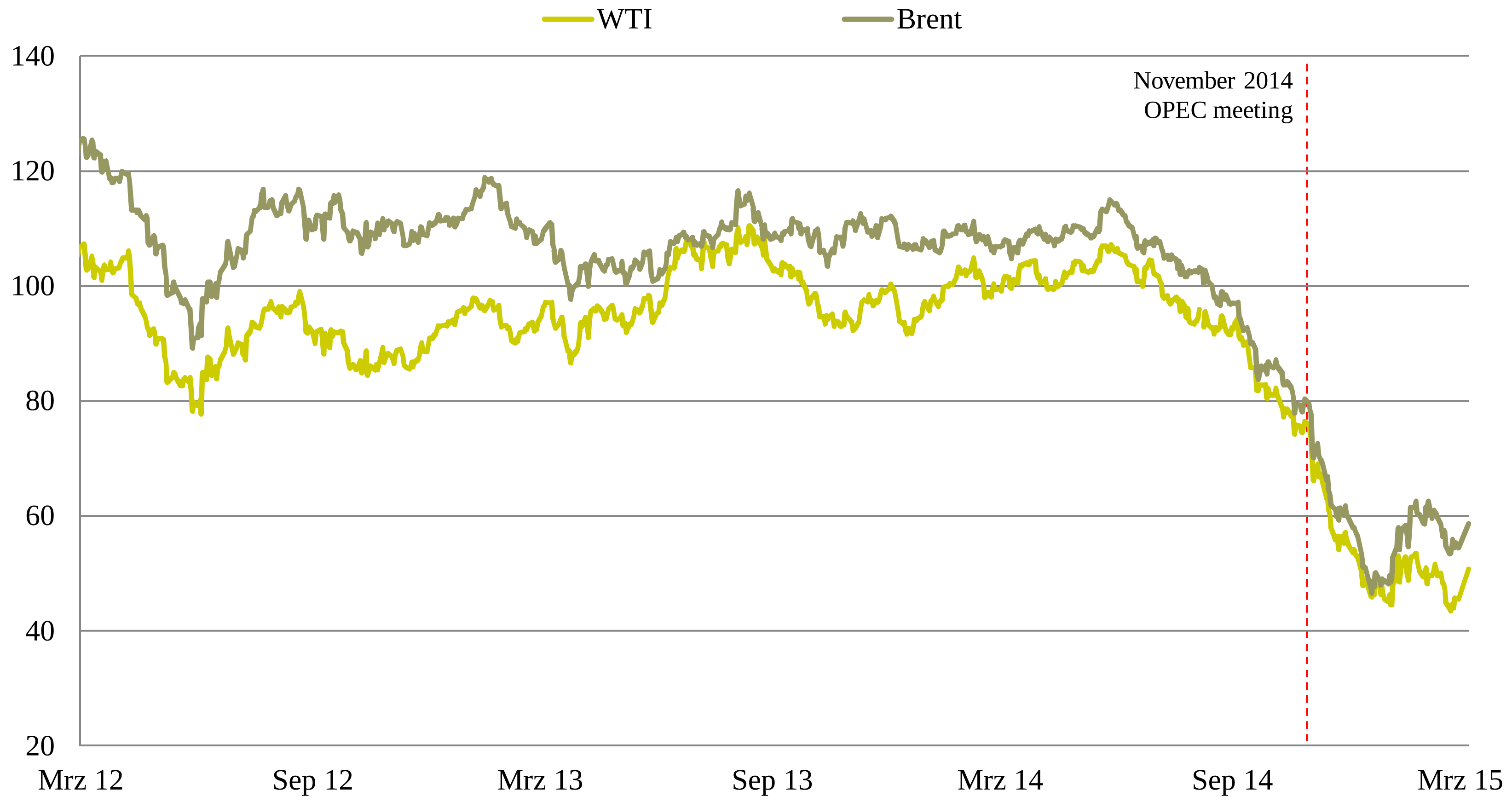
Oil is not dead, it just smells funny

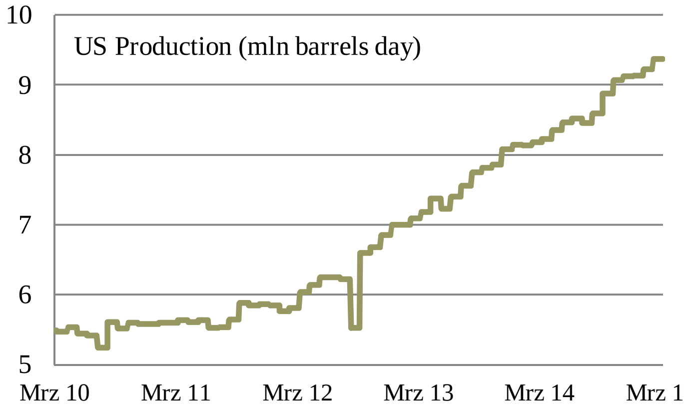
Zurich, March 31st 2015

What has happened ?
Key oil benchmarks have fallen by ~50%

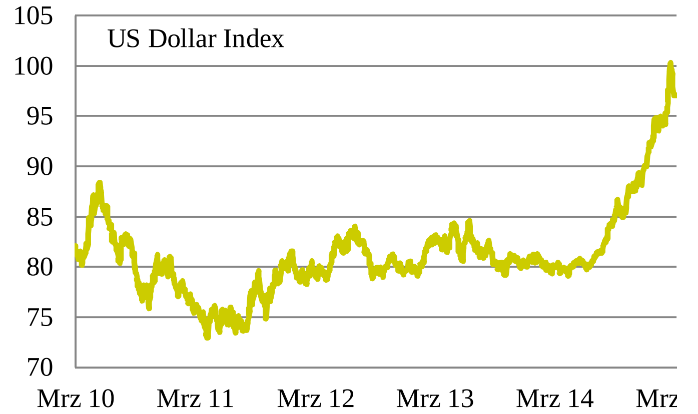


Why?
Rising US crude production and strong US dollar

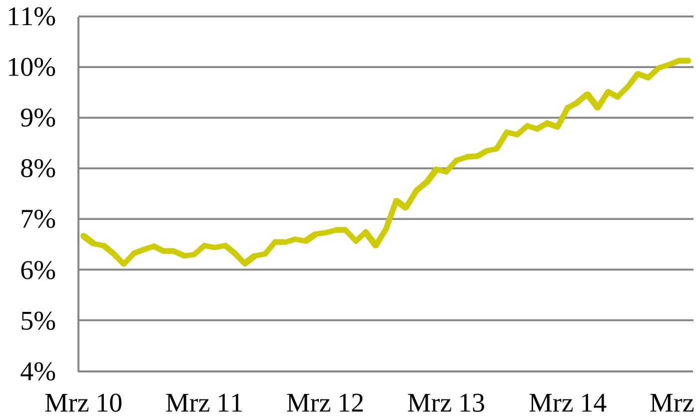
US production has been steadily rising



US dollar at strongest in over a decade



As has the US share of global production

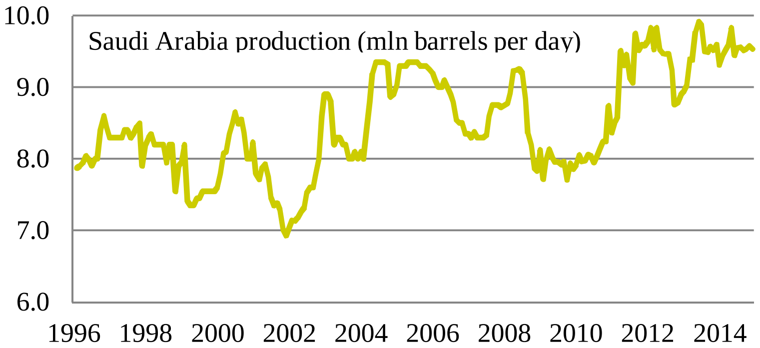


- US crude production up **70% over the last 5 years** and is now around 9.5mln bpd ï the same level as Saudi Arabia
- Excluding US, non-OPEC production up 6% in the same period while OPEC production up 4%
- Trigger for sharp decline in 2014 appears to have been rise in US dollar in anticipation of higher interest rates

Source: Bloomberg, Energy Intelligence Group

After decades of modest production growth, Middle Eastern producers focussed on market share

Saudi production up just 20% in 20 years



ñIt is not the role of Saudi Arabia to subsidise higher cost producers by ceding market shareò

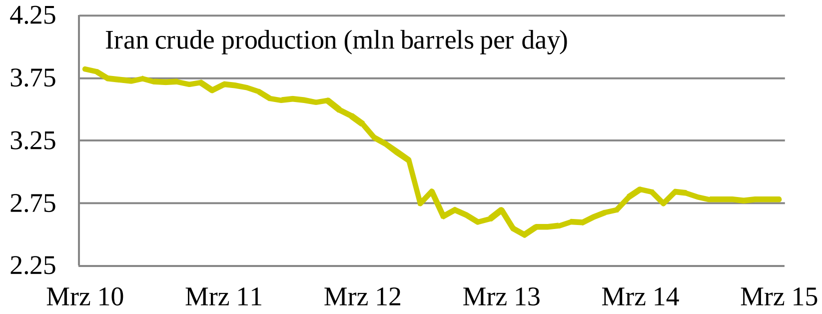
Saudi Oil Minister Ali al-Naimi, March 2015

ñWe donât have any other choice than keeping of production as it is because we donât want to lose our share in the marketò

Kuwait Oil Minister, Ali al-Omair, March 2015

- OPEC and the largest Middle Eastern producer Saudi Arabia refused to cut production from 30mln bd target at their November 2014 meeting
- Low oil prices puts pressure on Saudi Arabia / Gulf statesô strategic adversaries
  - US shale industry
  - Iran
  - ISIS

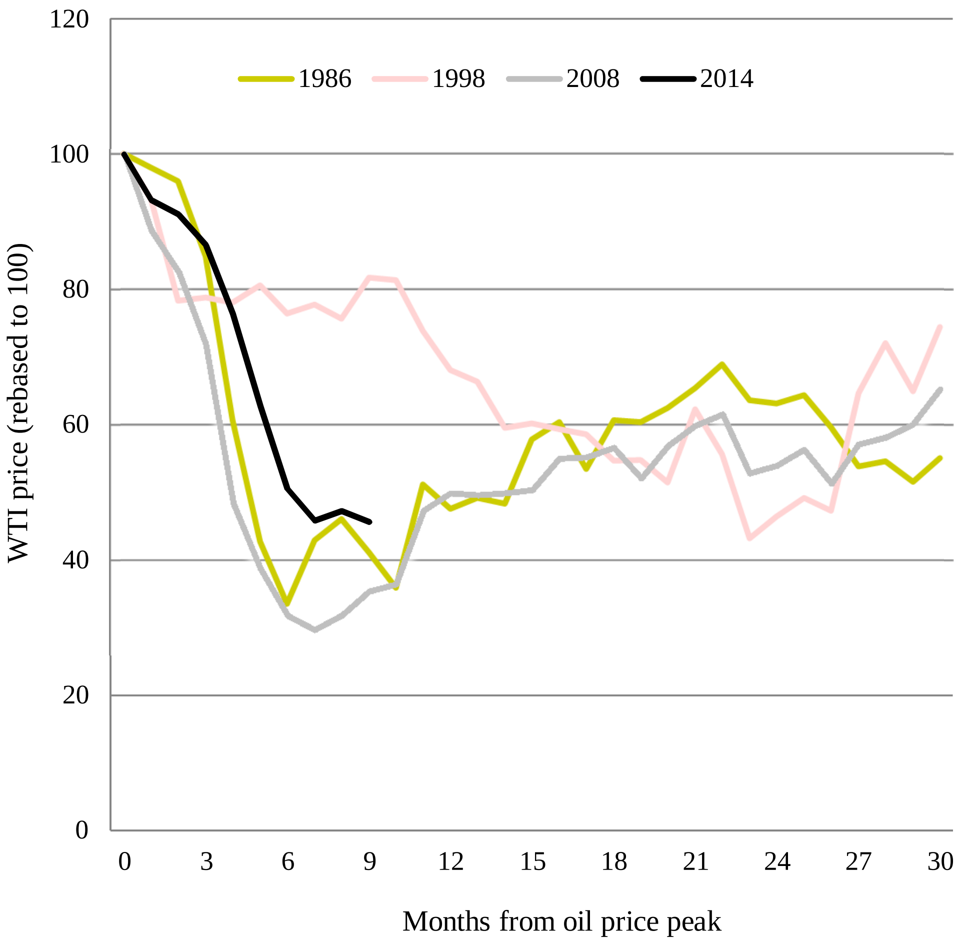
Market also focussed on return of Iranian crude



- Iranian crude exports are at 1.1mln bd ï around half of their pre-sanctions level
- A nuclear deal could see much of this oil return to market

Source: Bloomberg, Energy Intelligence Group

Speed and severity of recent decline resembles that of financial crisis and 1986 slump

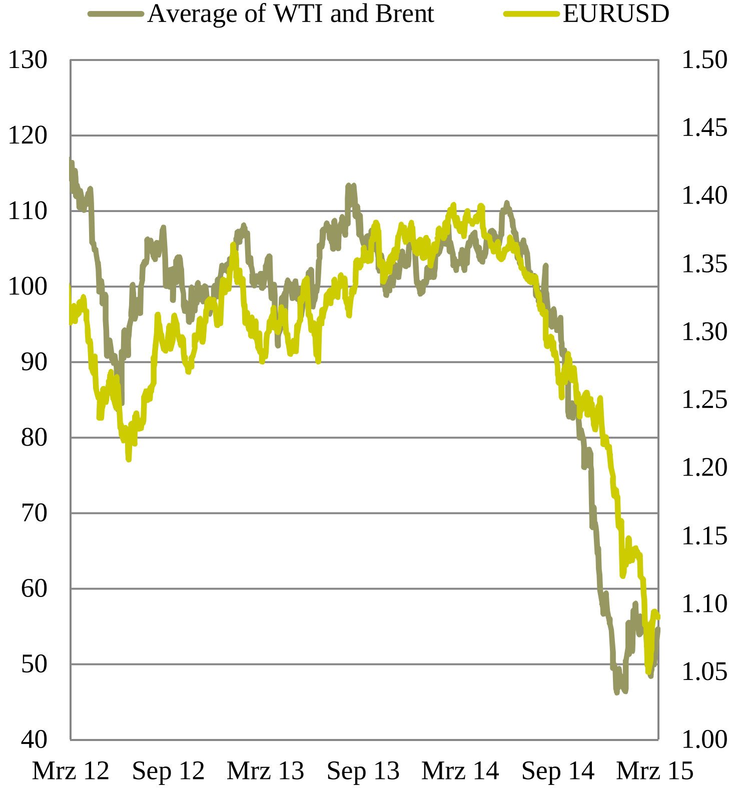


- Following previous slumps, oil got back to 55 - 75% of its peak value within two and a half years
- Suggests WTI could head back to $60 ï 75 by end of 2016
- Current situation has many parallels with 1980s oil price decline
  - The first half of the decade saw significant new production coming on stream (e.g. North Sea, Alaska) combined with a stronger dollar
  - Saudi Arabia adopted a strategy of defending market share in 1985, driving the price down towards $10 per barrel from ~$30
  - In 1986, OPEC members agreed to production cuts and an oil price target of $18
  - Prices did not regain 1985 peak until Gulf War (and then only briefly)

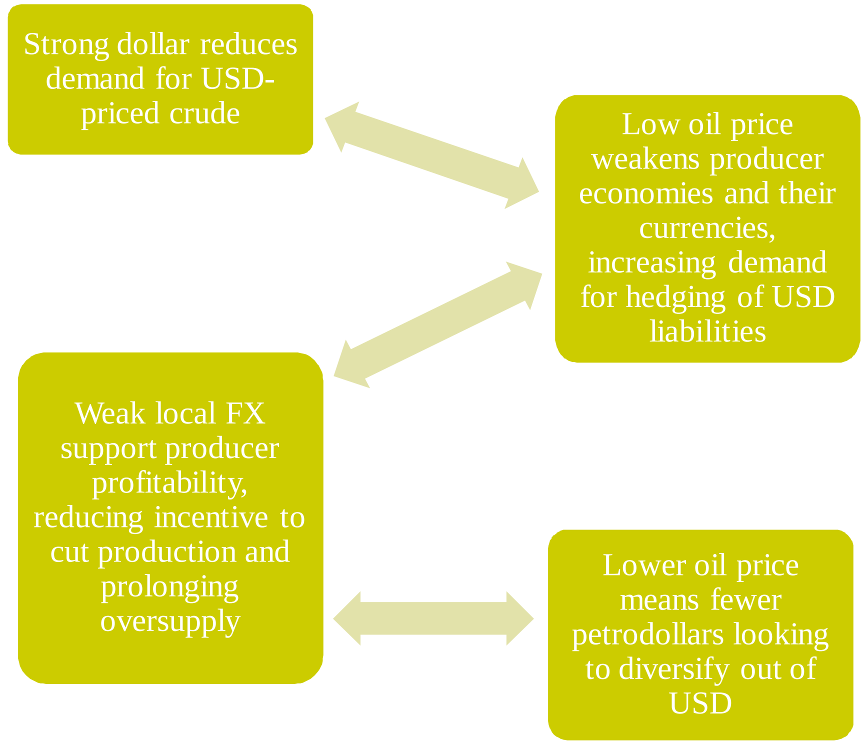
Source: Bloomberg

What role has the US dollar played in oilôs decline ?

Peak in crude came very soon after high in euro



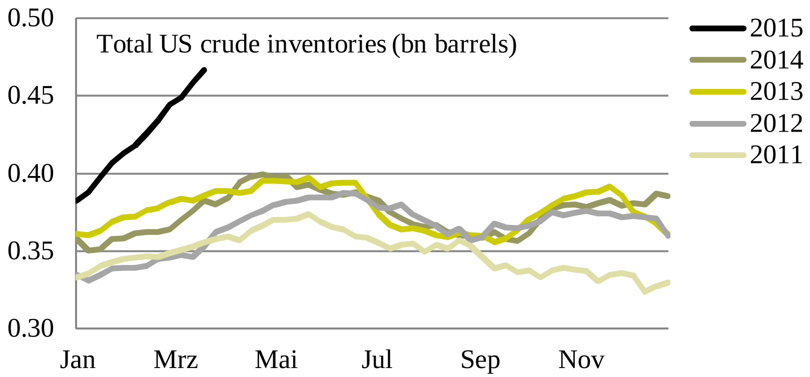
Currency and commodity ï complex dynamics



Source: Bloomberg

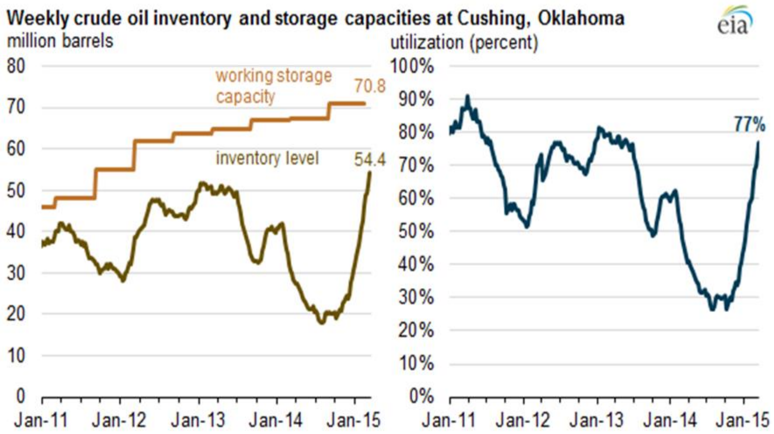
US crude inventories are at record highs supporting crude differentials

US inventories at record levels

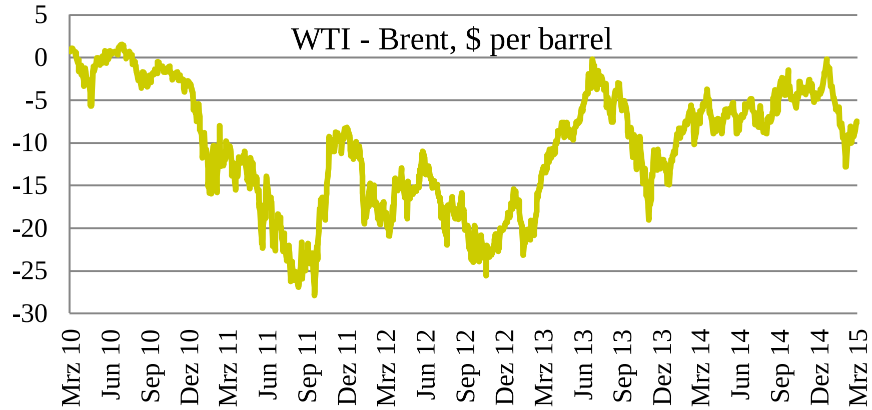


- Rising US inventories likely to keep WTI trading at discount to other benchmarks and in contango
- US refiners a key beneficiary of pricing differentials
- US producers keen to see an end to restrictions on export of crude oil from US
  - Restrictions put in place in 1970s in response to OPEC oil embargo look increasingly inappropriate
  - Easing of restrictions would support WTI pricing vs. other benchmarks

Storage capacity at Cushing filling up

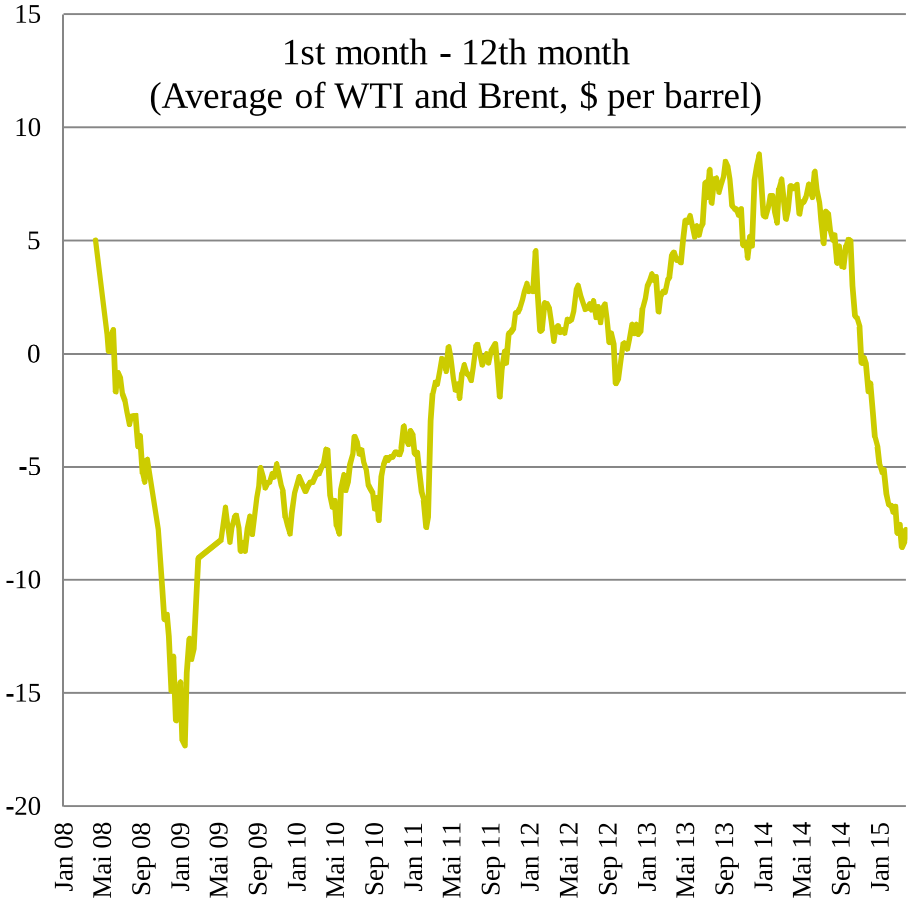


WTI Brent spread



Source: EIA, Bloomberg

Oil market has flipped from backwardation to steep contango

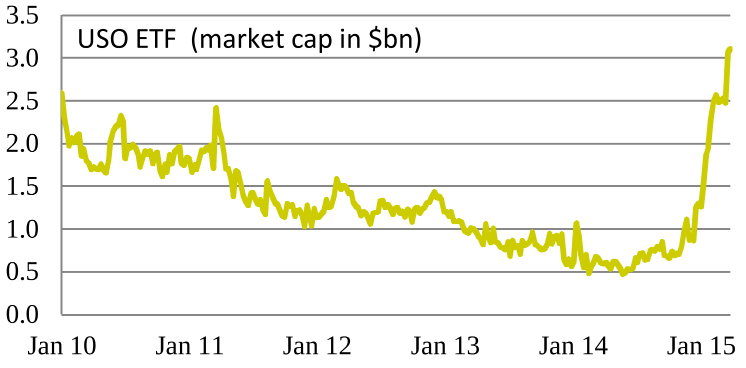


- Oil market has been in backwardation for much of the last 3 years
  - Arab spring increased concern about security of Middle Eastern supply
- Market has shrugged off more recent instability in Middle East and quickly flipped to steep contango amidst oversupply
- Oil storage has become profitable again
  - Front month WTI future trades at ~$9 per barrel discount to oil for delivery in a year
  - Front month Brent future trades at ~$7.5 per barrel discount
- However, contango in WTI reached over $20 in financial crisis so $9 not necessarily a floor
  - However, unlikely to see same forced unwinding of positions as in 2008 assuming credit markets remain stable

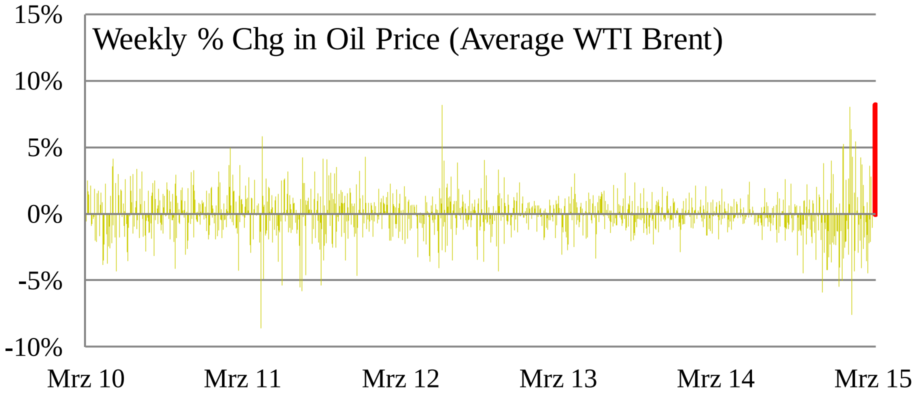
Source: Bloomberg

There is a lot of money looking to catch the bottom in oil ï and signs it may be near

Huge inflows into energy ETFs



Biggest weekly rise in oil since 2011



PE firms raising energy funds

Fund	Time in market	Target ($bn)
EnCap Energy Capital Fund X	5 months	5.0
EnerVest Energy Institutional Fund XIV	3 months	3.0
Carlyle Energy Mezz. Opportunities Fund II	5 months	2.5
New Enterprise Associates XV	2 months	2.5
Ardian Infrastructure Partners Fund IV	3 months	2.5
Copenhagen Infrastructure II	6 months	2.1
SummitView Capital Fund	4 months	1.6
Morgan Stanley Capital Partners VI	2 months	1.5
Ridgewood Energy Oil & Gas Fund III	3 months	1.5
Total		**22.2**

Source: Bloomberg

Energy markets can change quickly !

- Crude oil had the biggest weekly percentage rise in 5 years last week following Saudi intervention in Yemen
  - Potential risk to the Bab-el-Mandeb (ñGate of Griefò) strait between Yemen and East Africa
  - Carried 3.8mln barrels of oil per day in 2013, according to EIA estimates
- With many hedge funds continuing to bet on falling oil prices, short covering could continue to push prices higher