

Offshore Drilling Market Outlook from an Asian Perspective



19 April 2016

Offshore Drilling Rigs
Marina Bay Sands

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Our focus areas

- Gathering & analysis of market data
- Independent market modelling & forecasting
- Measurement & analysis of competitive positions
- Industry consultation & in-depth perception surveys
- Analytics, analysis, insight – commercial focus

What we don't do

- Sell data strips, repackage information
- Work for everyone and tell them the same story
- Rely exclusively on our own information – we cross reference

"You have restored my faith in market research"

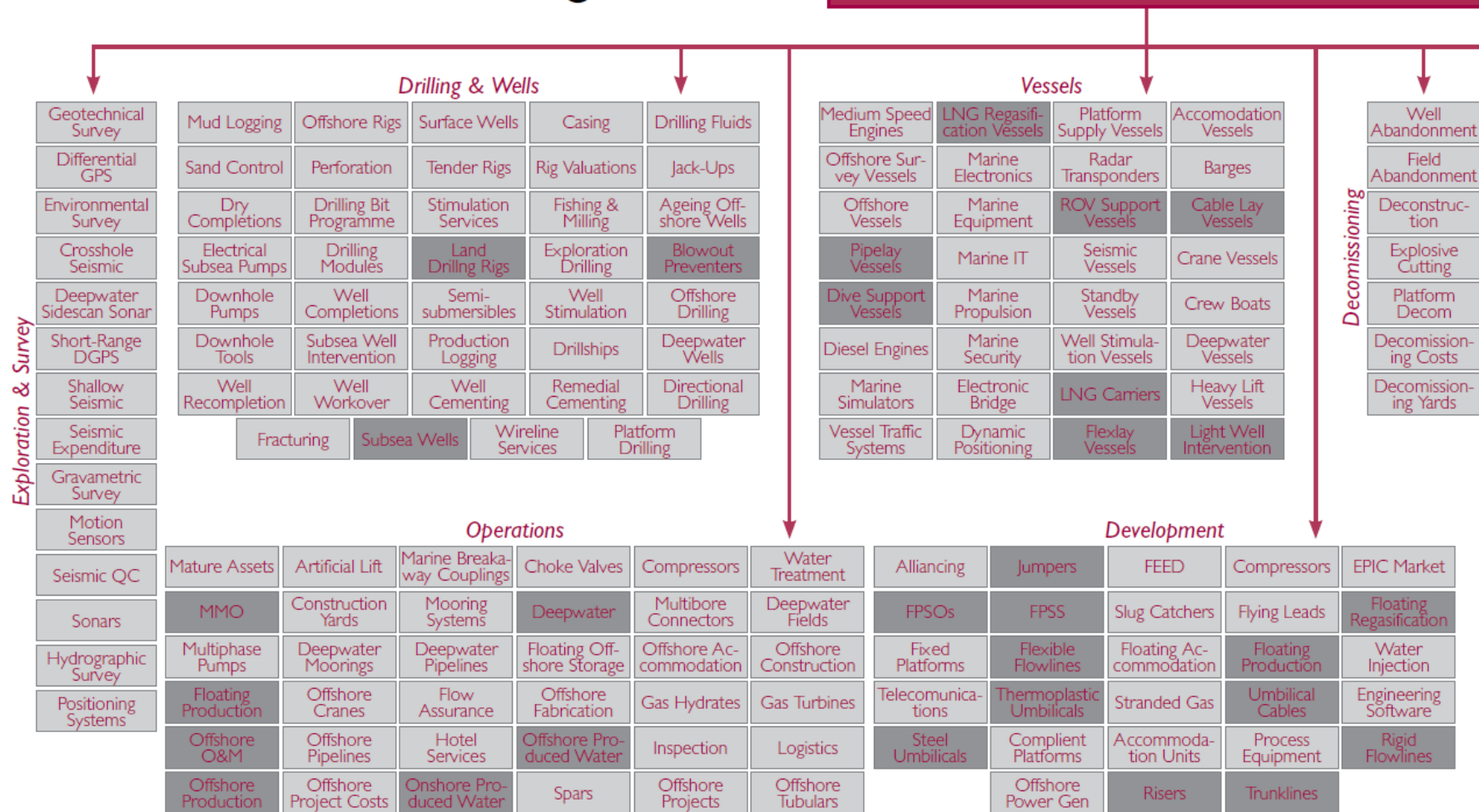
Private Equity Firm

"DW's approach to the project was much more professional than its competitors"

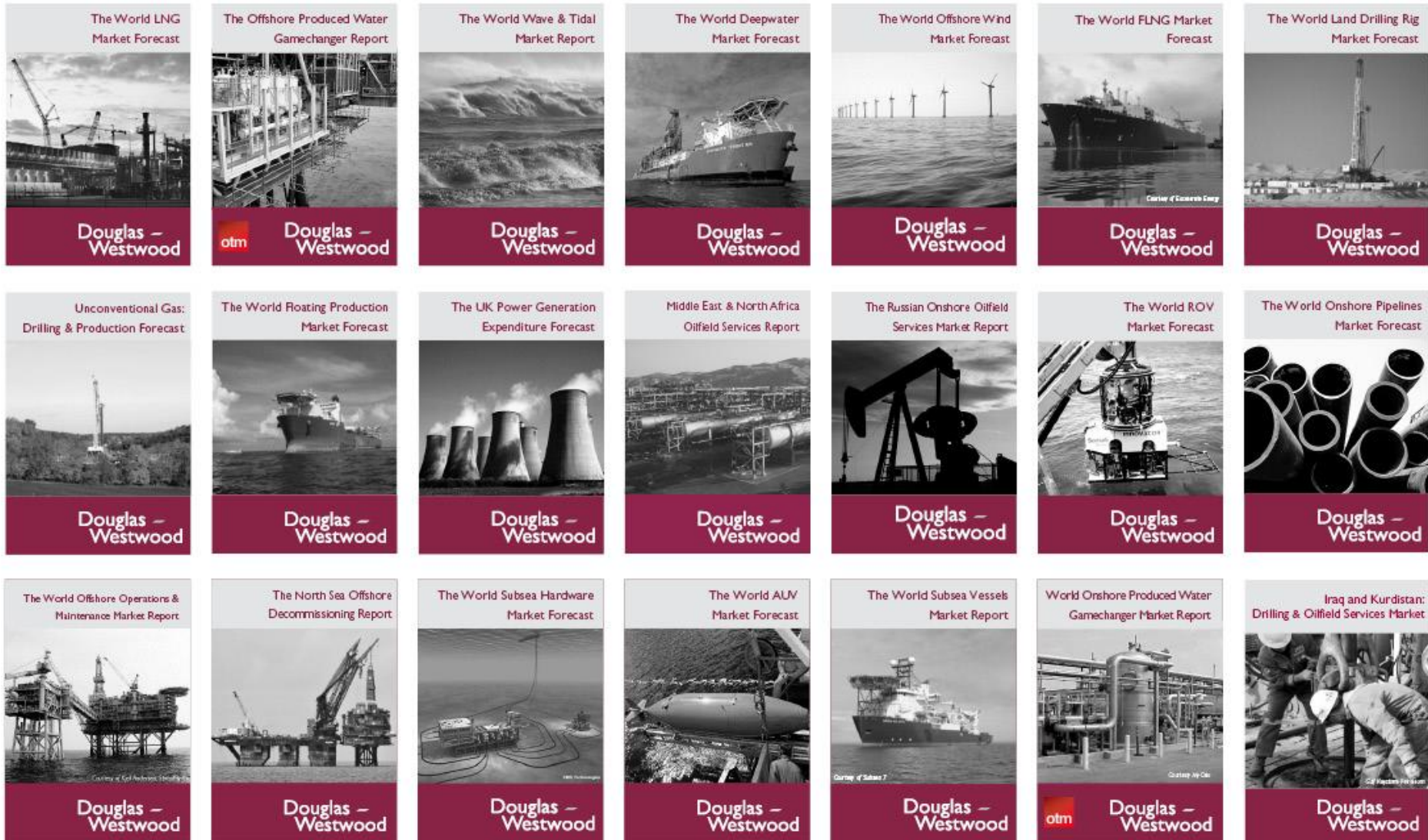
Chairman, Offshore service company

Other Capabilities

Extensive DW Knowledge Base



Industry-Leading Published Research



"Excellent report, very comprehensive and well laid out" Vestas (Denmark)

Douglas-Westwood are the sector study experts' Woodside (Australia)

Industry Accolades & Key Clients

Industry Accolades



- DW's transaction support services are widely recognised by industry – this is demonstrated further by our acknowledgements to date.
- Our research and consulting work is trusted by energy industry players, governments and investment houses.
- We are trusted by Top-10's, including;

Top 10

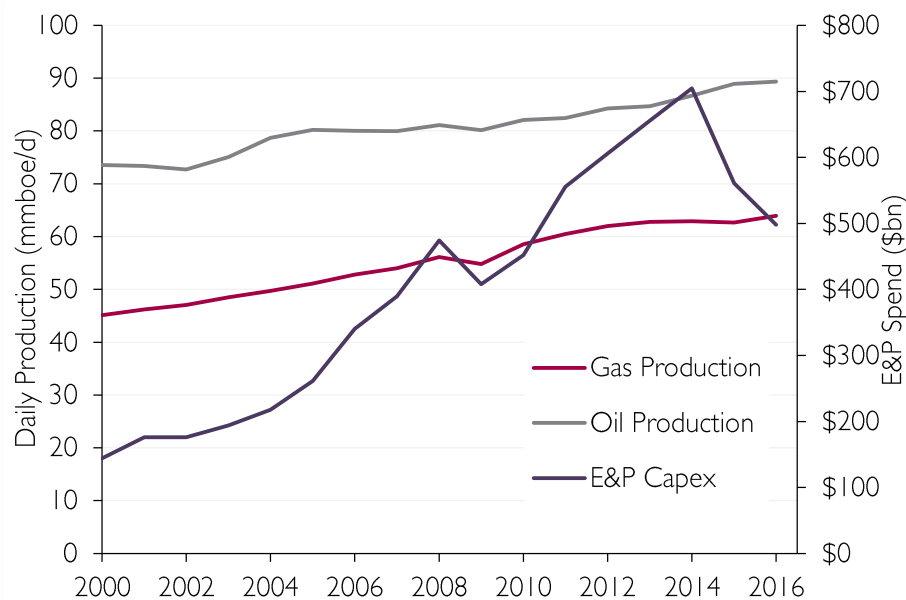


Macro-economic Environment and Oil Price Implications

Offshore Drilling from an Asian Perspective

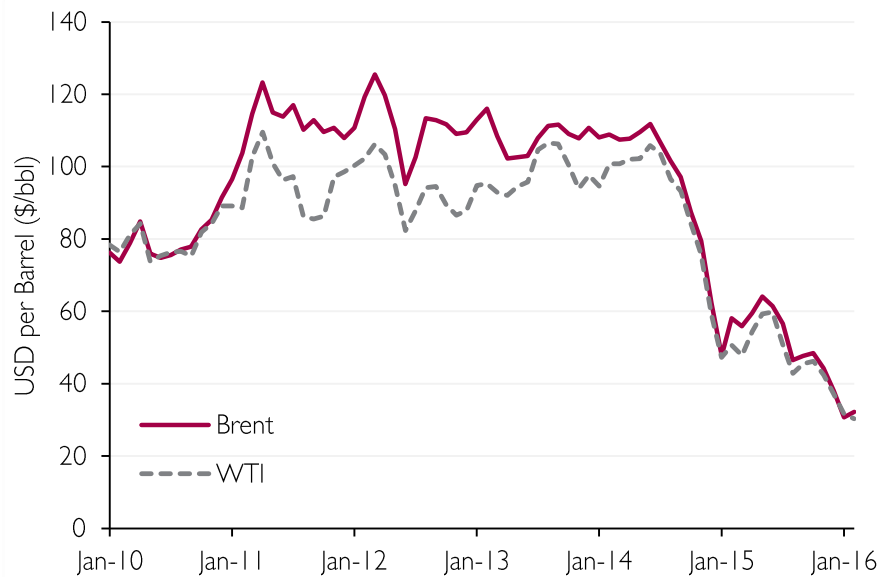
Conclusions





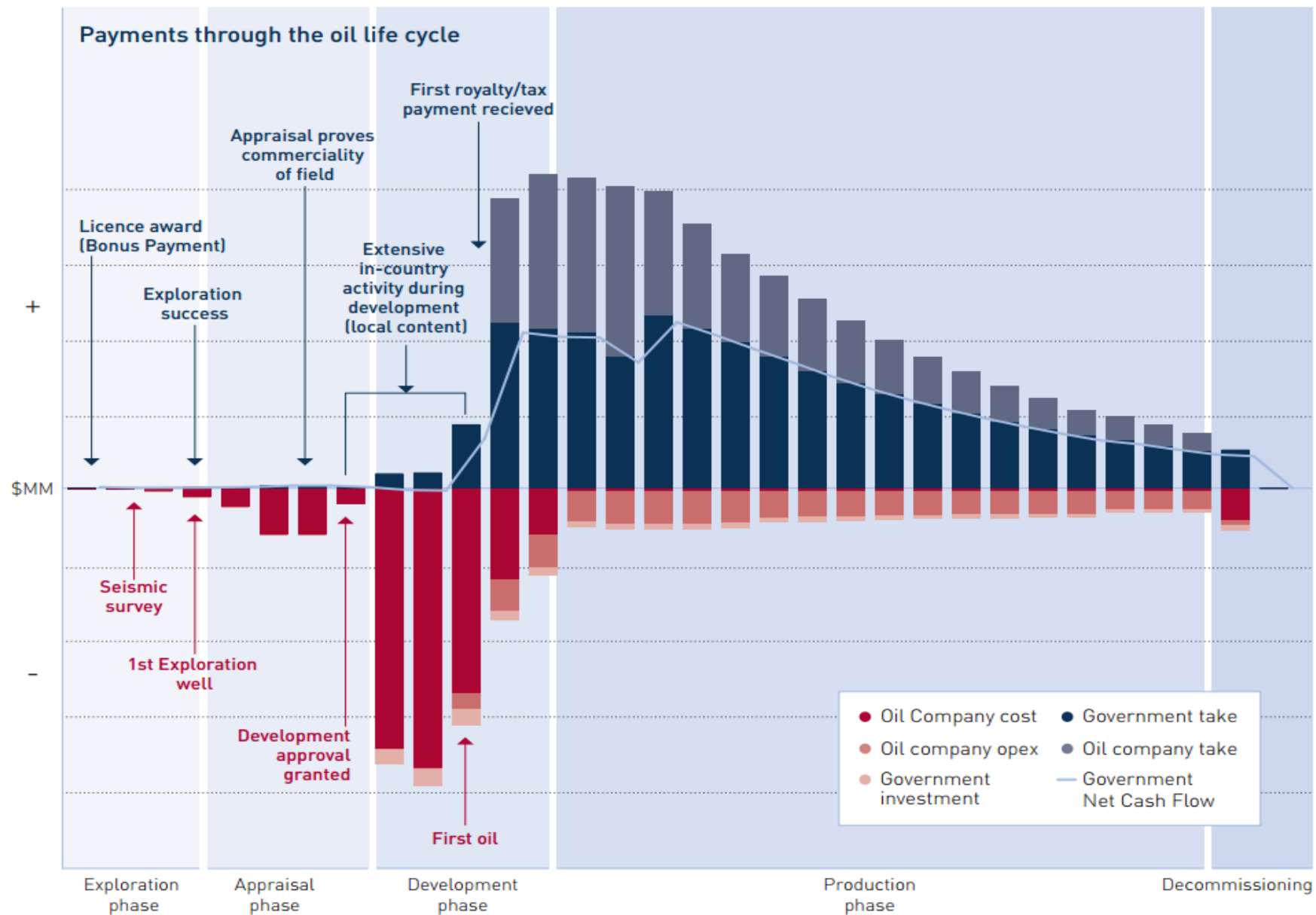
Source: Evercore ISI, Douglas-Westwood

- E&P Capex up 389% over 2000-14.
- Production up only 18% for oil and 40% for gas over same period.
- Oil price collapse has reduced costs ~20-30%.
- Deflation likely to persist in first half of 2016 before seeing upward movement at a slight lag to oil prices.
- Project revisions and contract renegotiation to persist offshore (e.g. Mad Dog Phase 2).
- Must keep on top of costs in next upcycle!

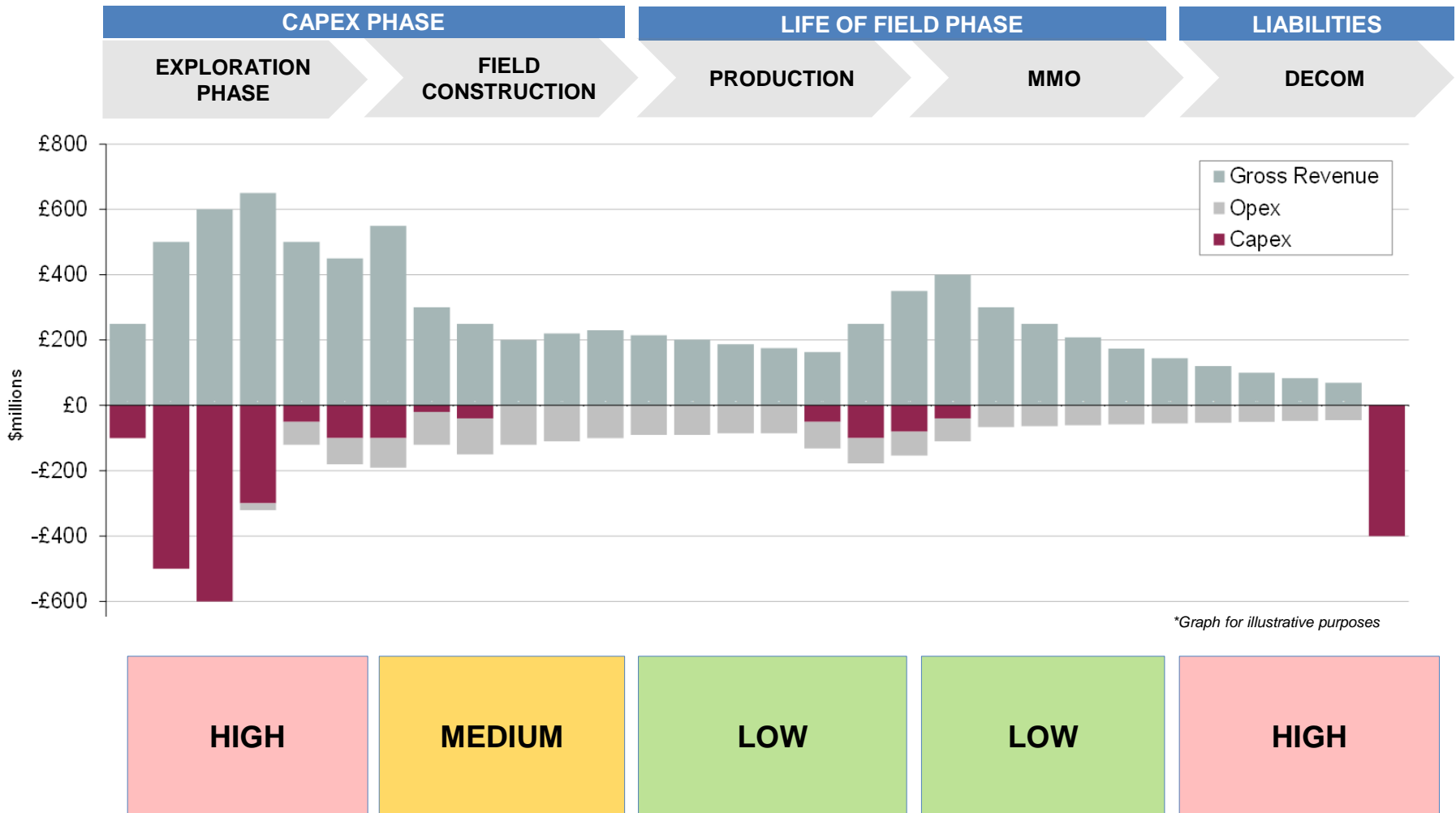


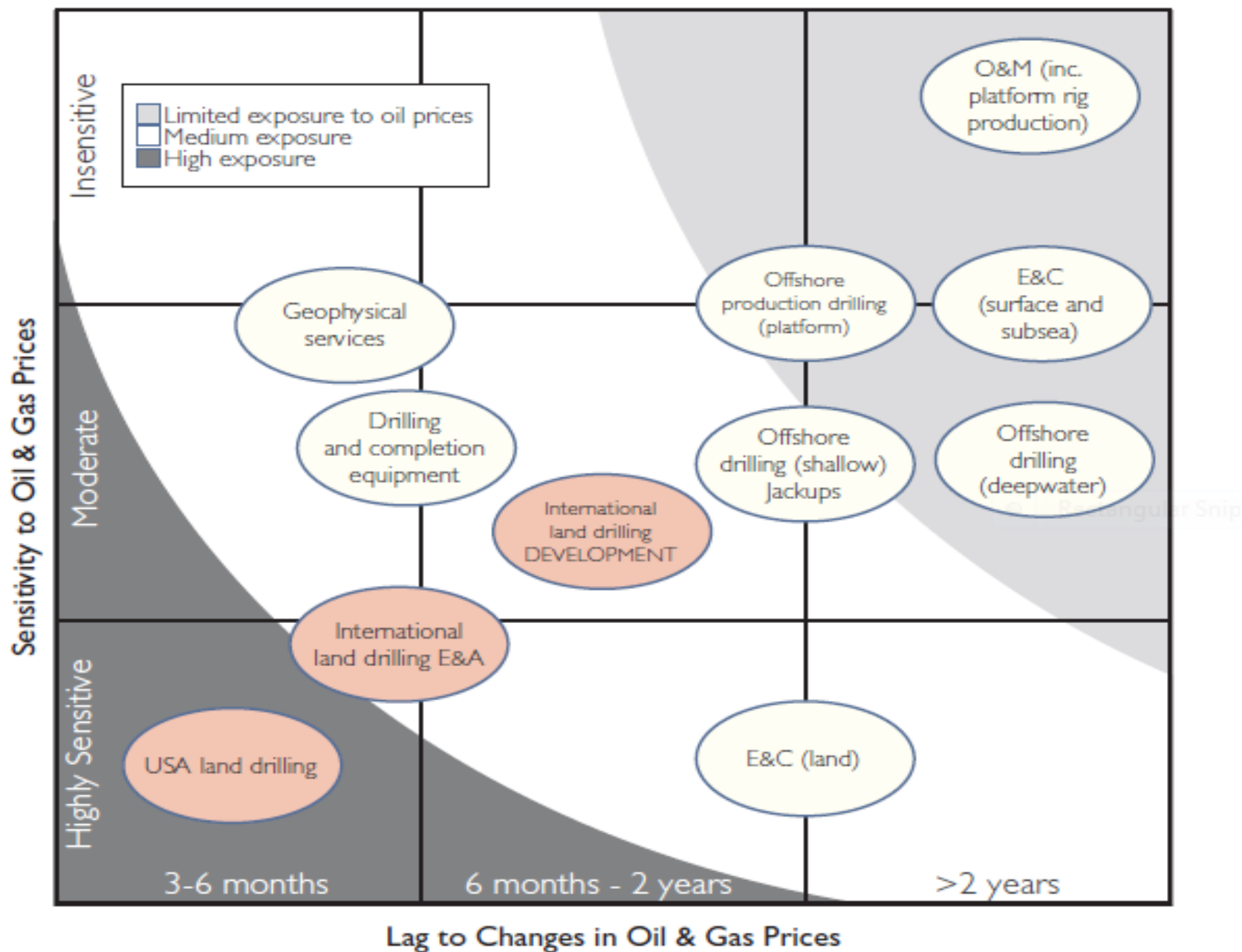
Source: EIA

- US oil supply surged by 3 mbbbl/d over 2008-14.
- Chinese economic growth and oil demand slowed in summer 2014 – fear of oversupply.
- November 2014: OPEC abandon swing producer role by maintaining production.
- Oil prices fell ~40% in 2 months (Nov 14-Jan 15)
- Small recovery in Q2 2015, followed by double dip – Chinese stock market crash, Iranian sanctions, record KSA and Iraqi production.
- December 2015: OPEC abandons quota, rising KSA-Iran tension, US export ban lifted.

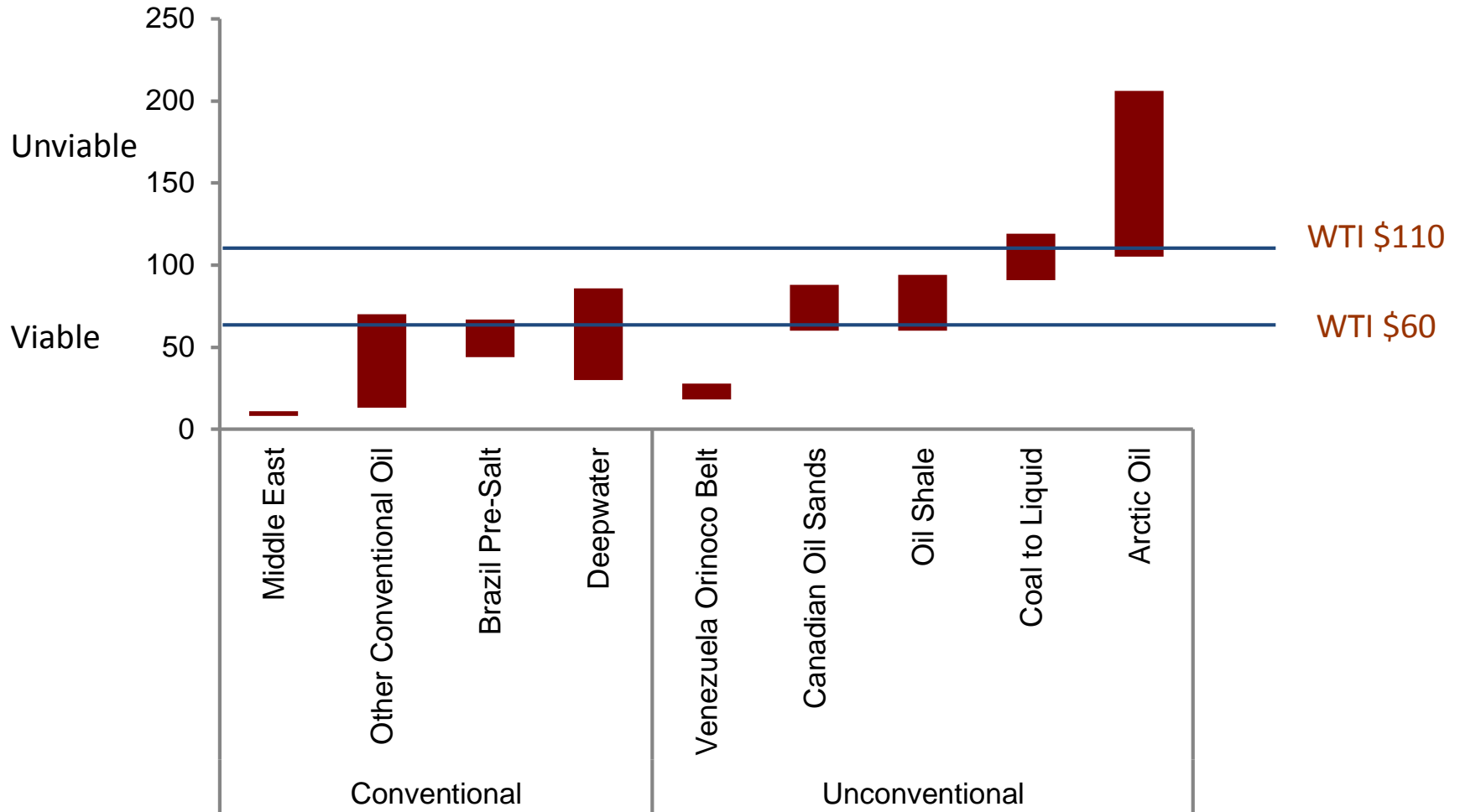


Offshore Field Lifecycle: Oil Price Exposure





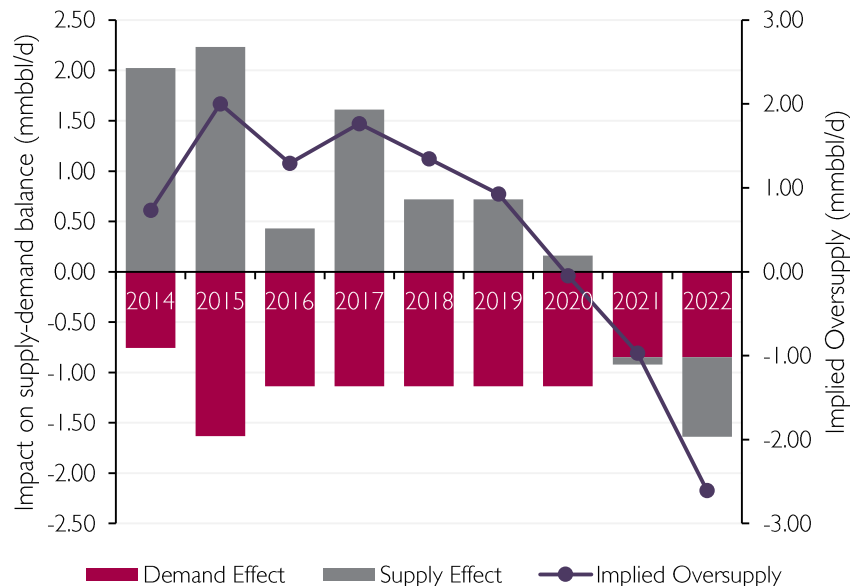
Viability of oil developments (\$/bbl)



Sources: Douglas-Westwood

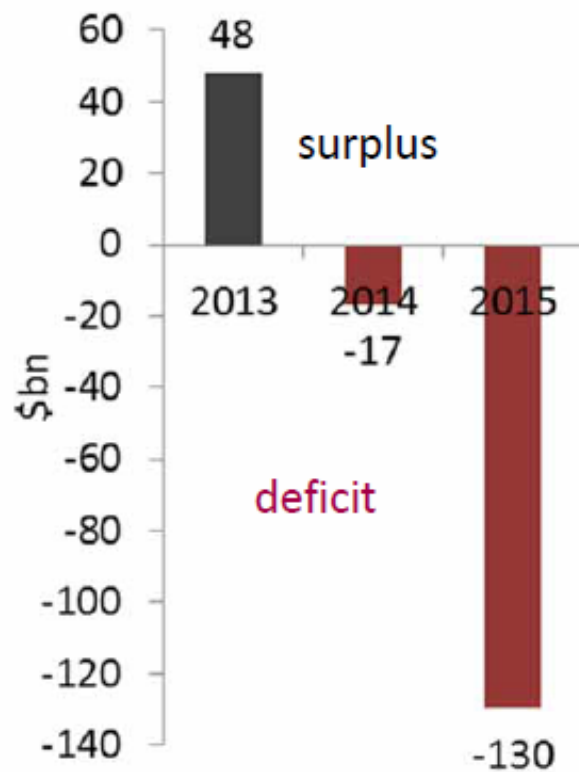


Wildcards, Geopolitics and Disasters



Source: Douglas-Westwood

- Major external factors affect the O&G industry.
- A volatile and ever changing market, with many large players vying for dominance.
- Who will win the “war of attrition”?
- Tensions within OPEC – break-up of the cartel?
- Production freeze to hold?



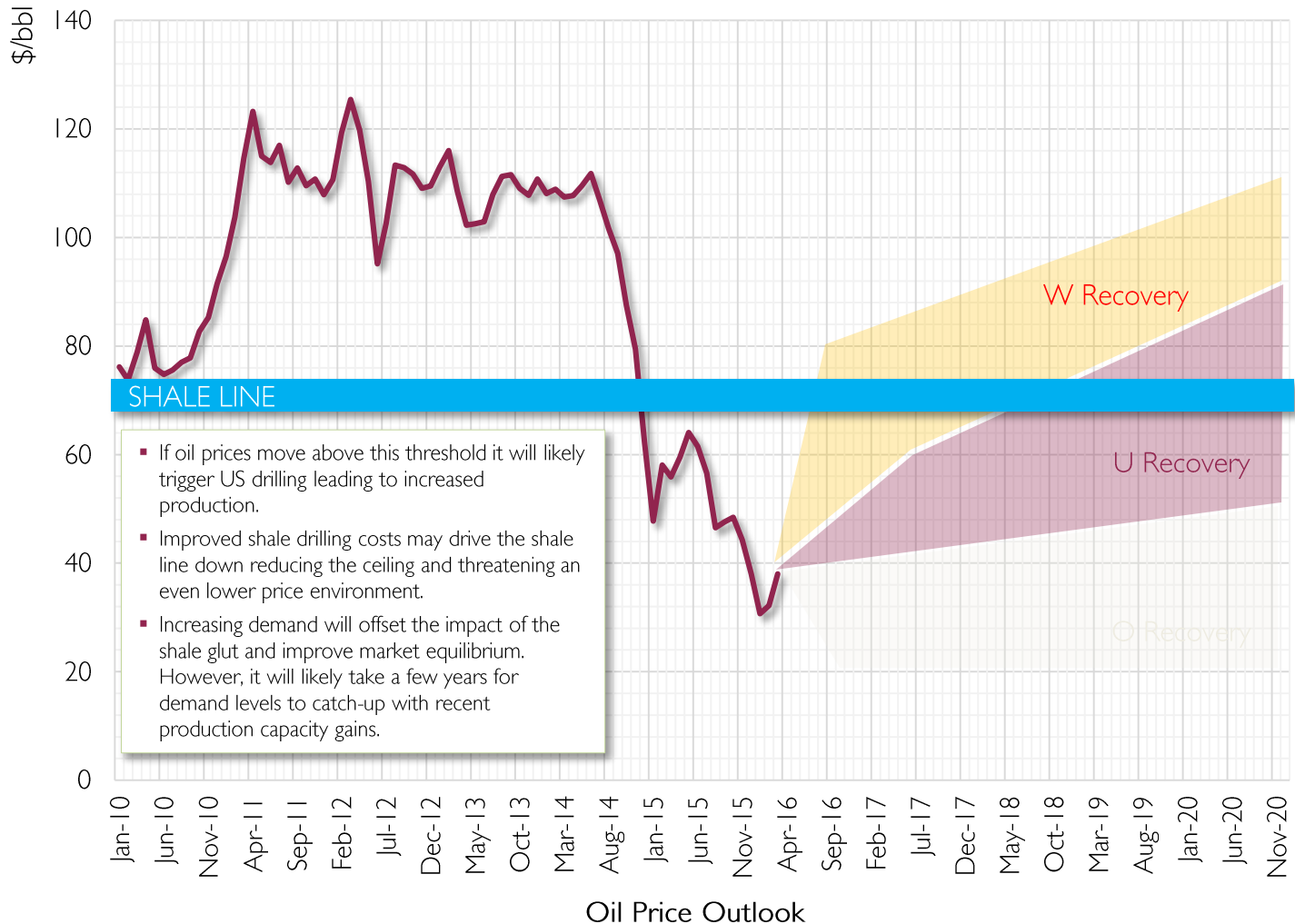
Source Financial Times

Oil Prices & Saudi's Balancing Act

- \$130bn budget deficit in 2015?
- Raising \$27bn from bond market
- Pulled >\$70bn from fund managers
- Needs \$105 oil, or....
....to grow production by 133%

Oil Price Update

Oil prices expected to remain suppressed through 2017 before recovery in 2018 – albeit prices not expected to exceed \$100/bbl over the next five years



Macro-economic Environment and Oil Price Implications

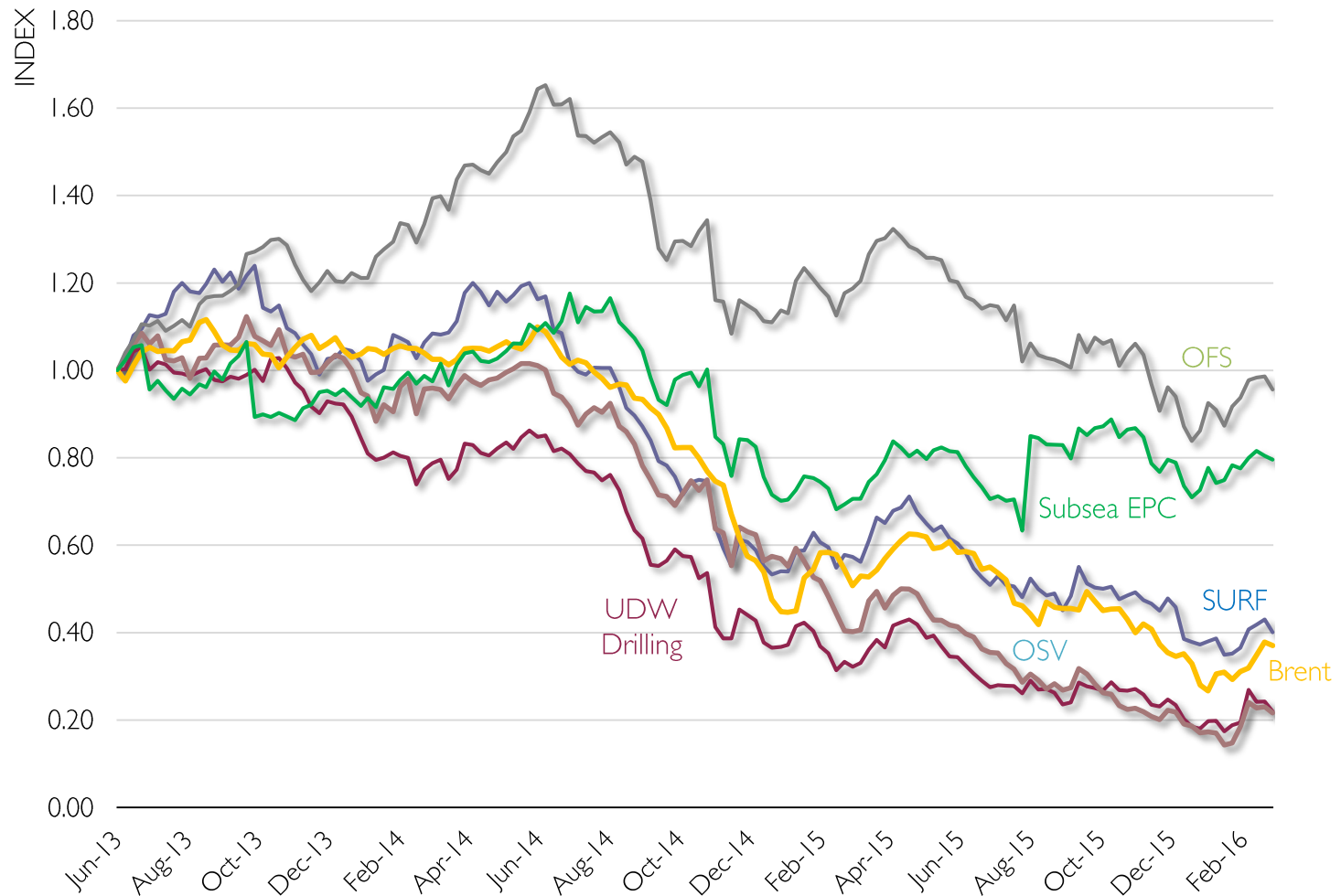
Offshore Drilling from an Asian Perspective

Conclusions



Where are we Today? Sector Performance

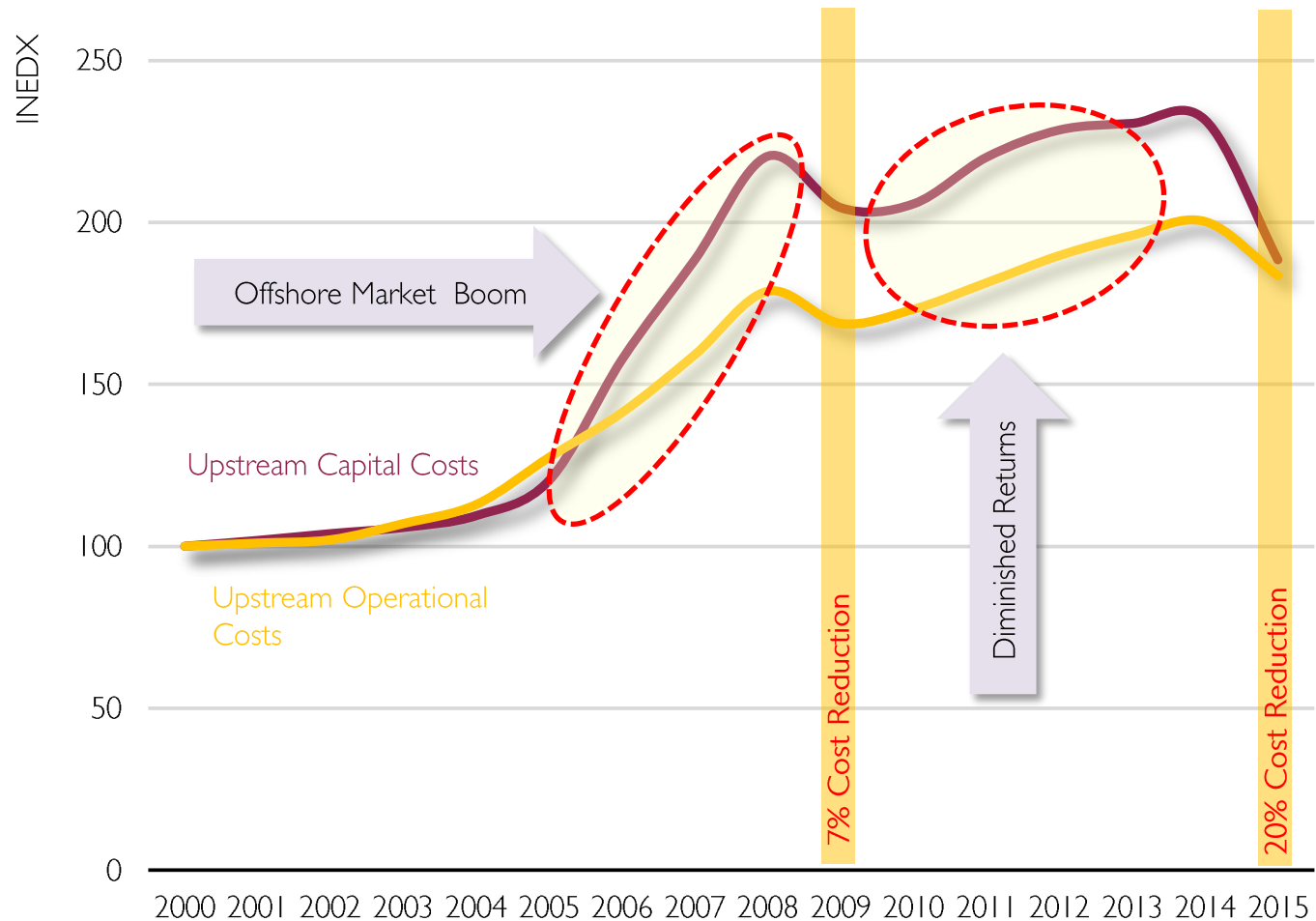
Asset focused players have seen the worst of the recent downturn...



INDEXED Share Performance of Various O&G Supply Chains

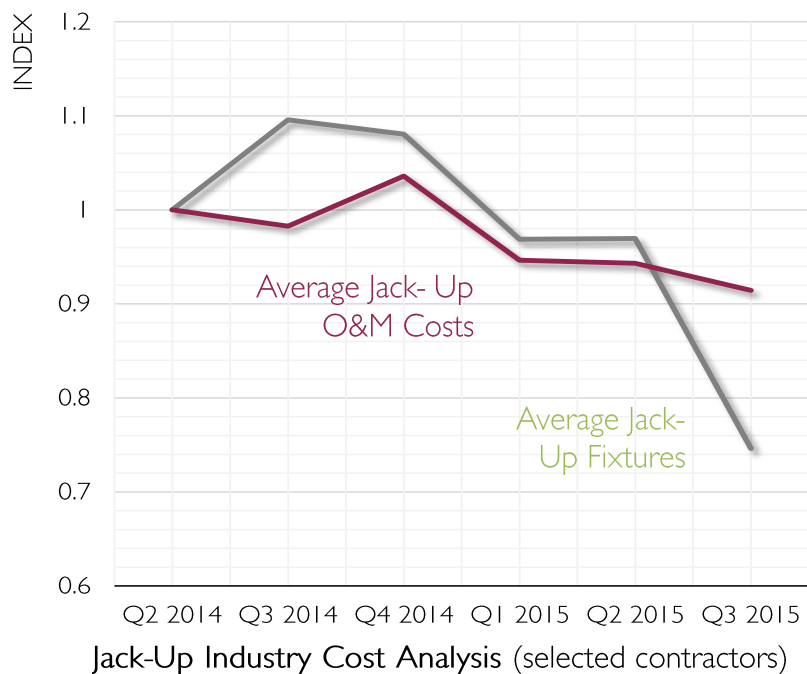
Do We Need \$100/bbl? Market Correction

Development costs are 20% down from 2014 highs alleviating need for high oil prices...



Upstream Cost Inflation Indices - CERA

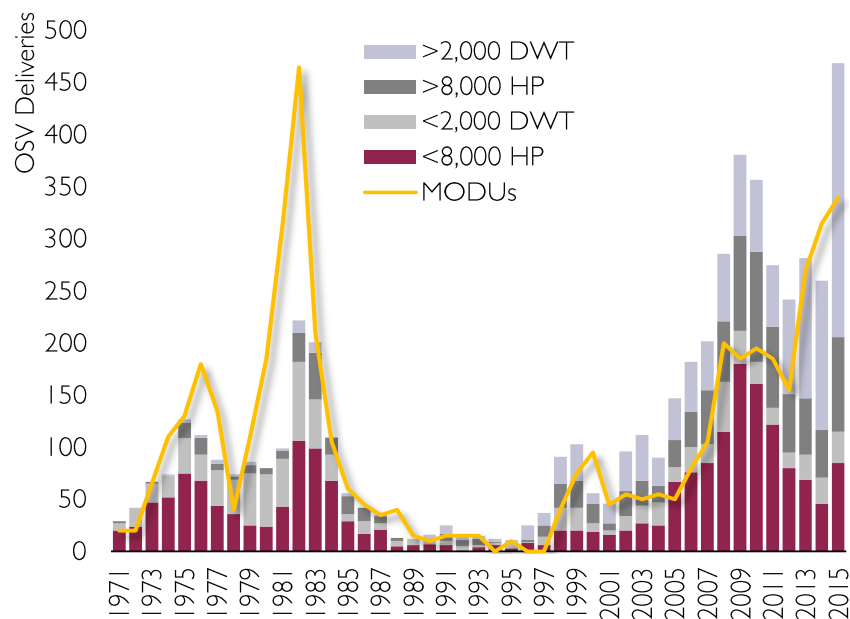
E&P have been successful in pushing down supply chain costs... Contractors are struggling...



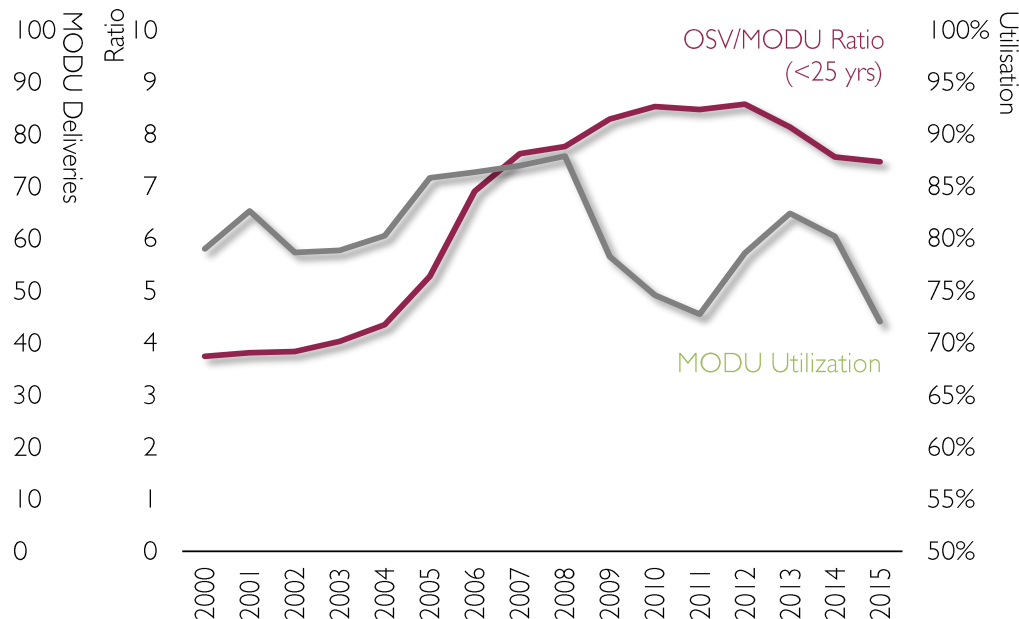
- Supply chain costs have typically mirrored E&P costs historically with regards to inflation.
- However, The current environment has shown greater ability for E&P to cut costs as compared to their suppliers.
- Jack-Up fixtures have shrunk by 30% on average over the past year but O&M costs have typically fallen by just 10-15%.
- A major discrepancy is labour. Offshore marine contractors are often left footing the labour bill.
- Labour costs for rig contractors have fallen by just 10% compared to 20-25% for R&M and SG&A.



Rampant overbuilding has allowed E&P customers unprecedented buying power which is hurting contractors...



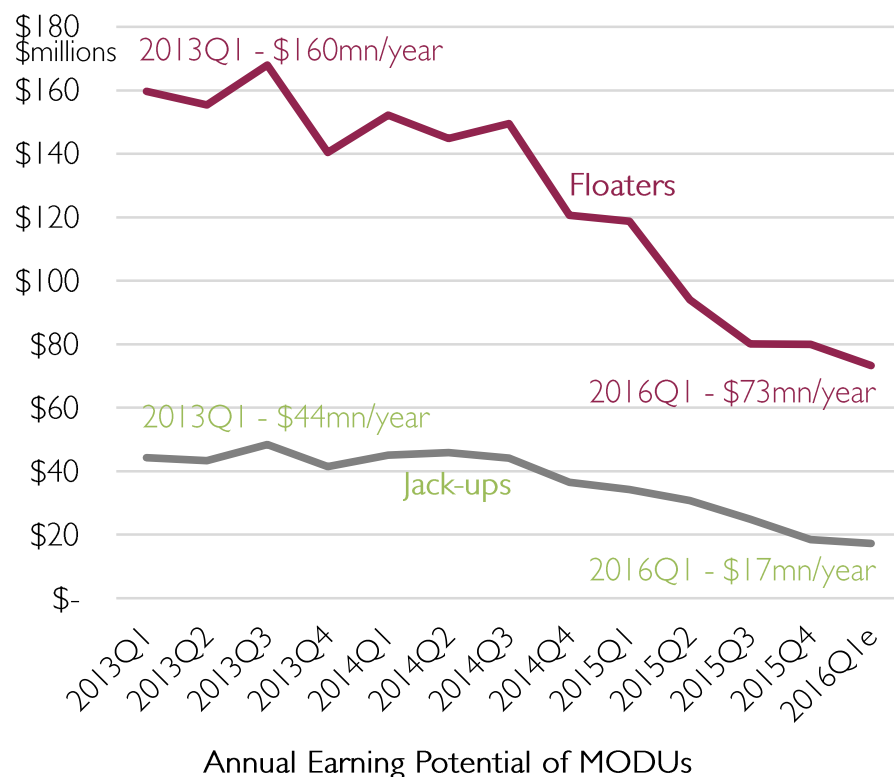
Historical OSV Deliveries vs MODU Deliveries



OSV/MODU Ratio vs MODU Utilization

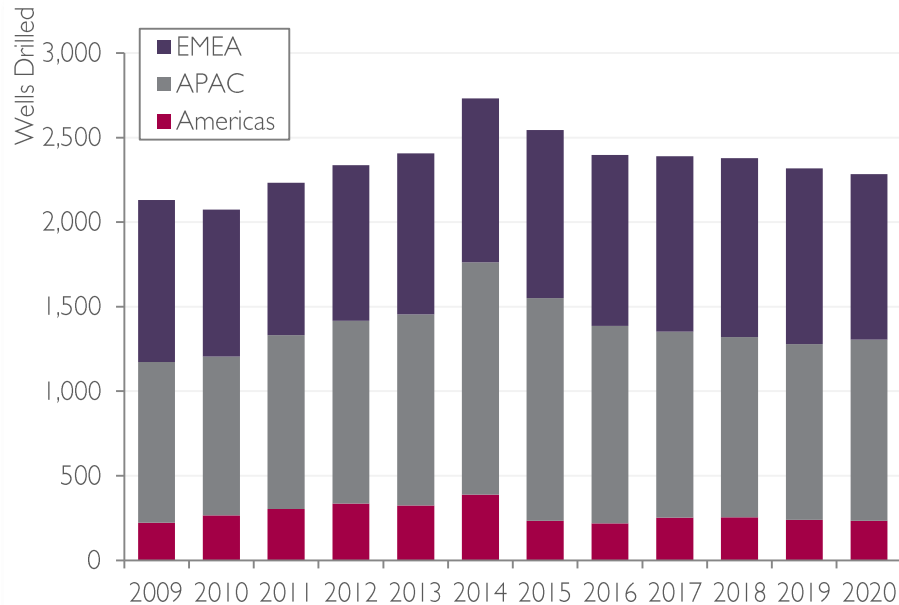
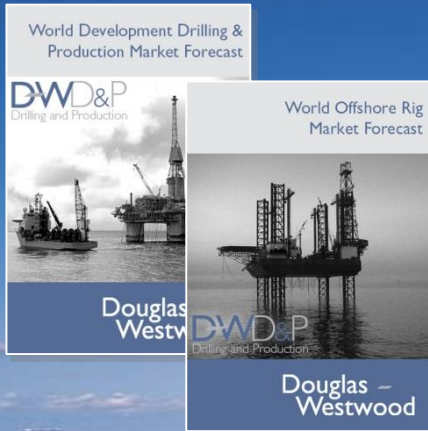


Impairments have been widespread, but now is the time to make tough decisions...



- Impairments are occurring throughout all asset-related O&G supply chains.
- How much is an offshore asset worth?
- The reality... assets were over priced and likely won't work as long or for as much money as previously thought.
- Today, the average annual earning potential for a jack-up is 61% down from 2013 – 54% for floaters.
- Mild recovery expected in 2017/18 but not close to 2013/14 levels.
- Further write-downs are likely for any <10 year old asset not on contract.
- BUT... realigning assets with the market should position contractors well for the recovery.

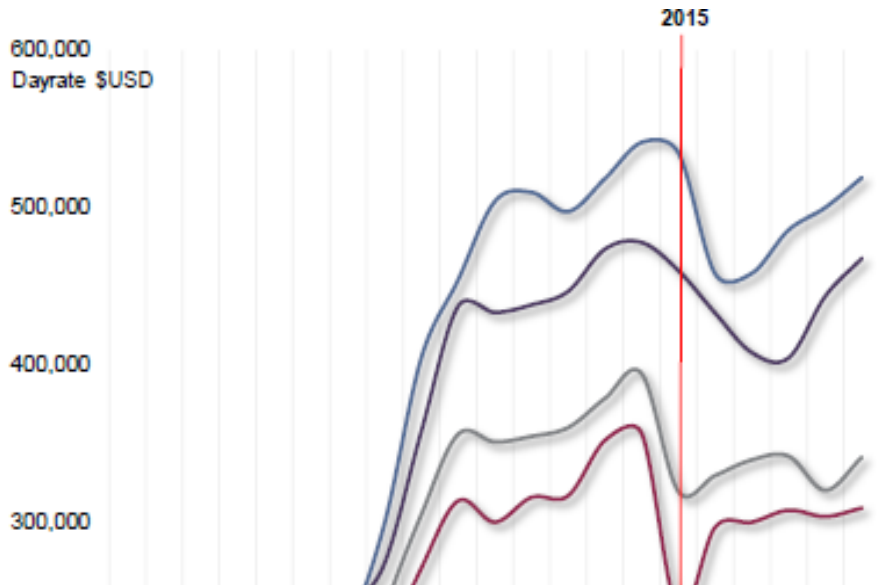




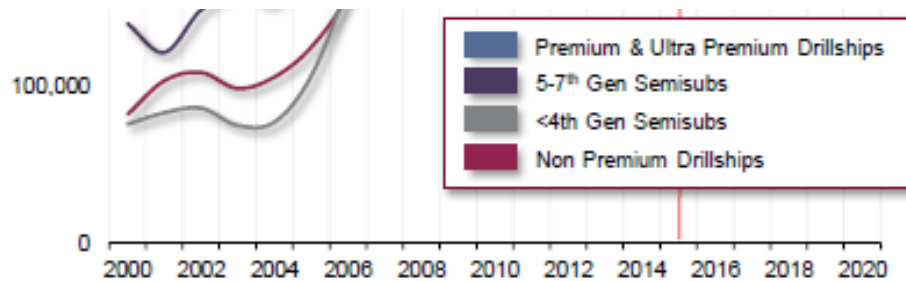
Source: Douglas-Westwood

- A key leading-indicator of industry demand.
- Shallow water gas a prominent driver in APAC. Middle East almost entirely shallow water.
- Offshore, demand will fall to five year low in 2015. Rig oversupply is a major issue.
- Transocean and others retiring rigs and plan to retire more. New deliveries being delayed.
- Petrobras corruption issues will limit Brazilian market.





Note that dayrates for jack-up should be significantly lower



Average Floating Rig Dayrate Analysis

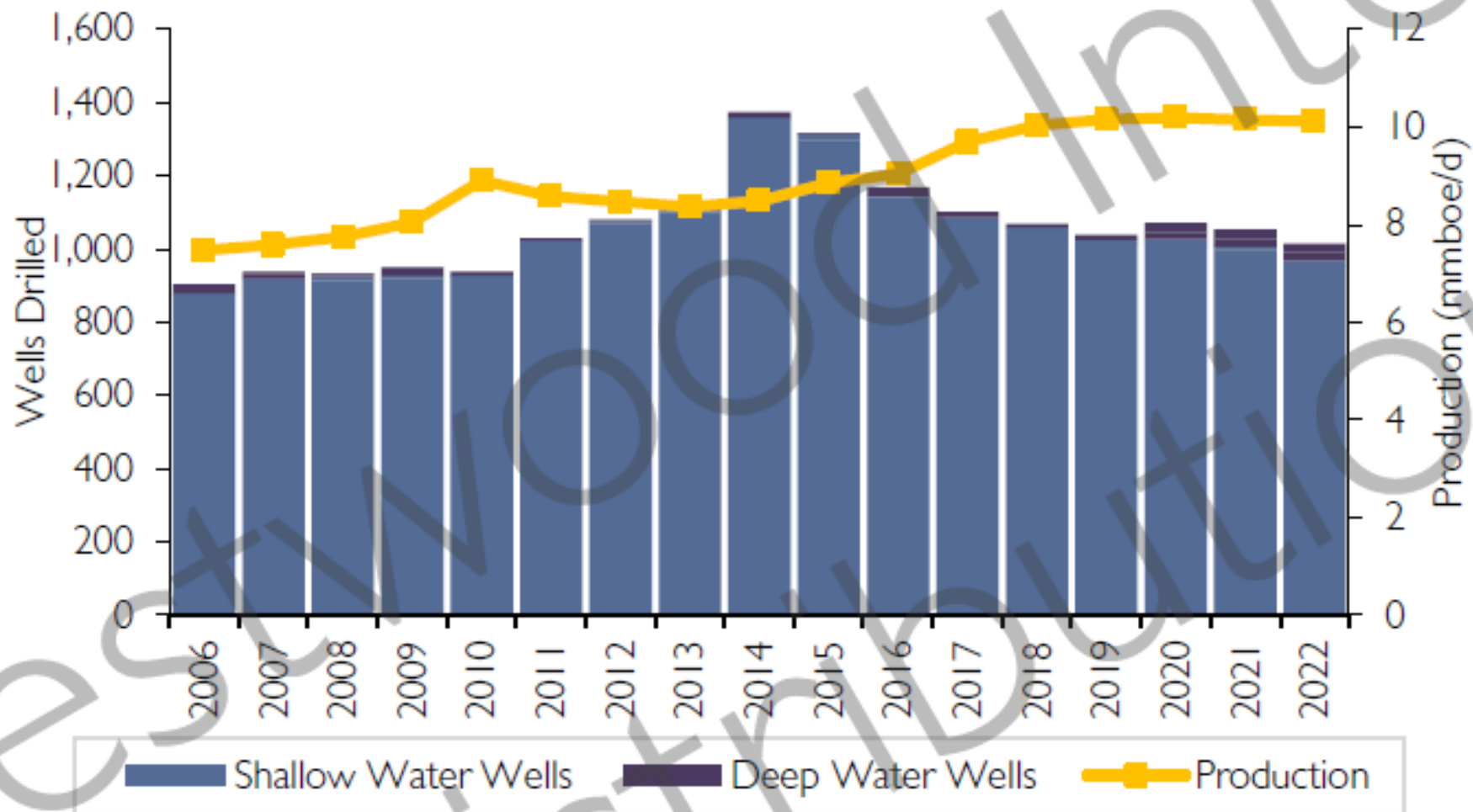
Source: Douglas-Westwood



- MODU rates have fallen in 2015 across all segments and will continue to struggle until 2017/18 when orderbooks begin to thin-out

“Obviously when there is lack of demand of course the prices come down. There are so many rigs not being used at full capacity. Dayrates are seeing reductions of around about 40%.”

APAC – Offshore Drilling and Production Q1 2016



Malaysia – Offshore Drilling and Production Q1 2016

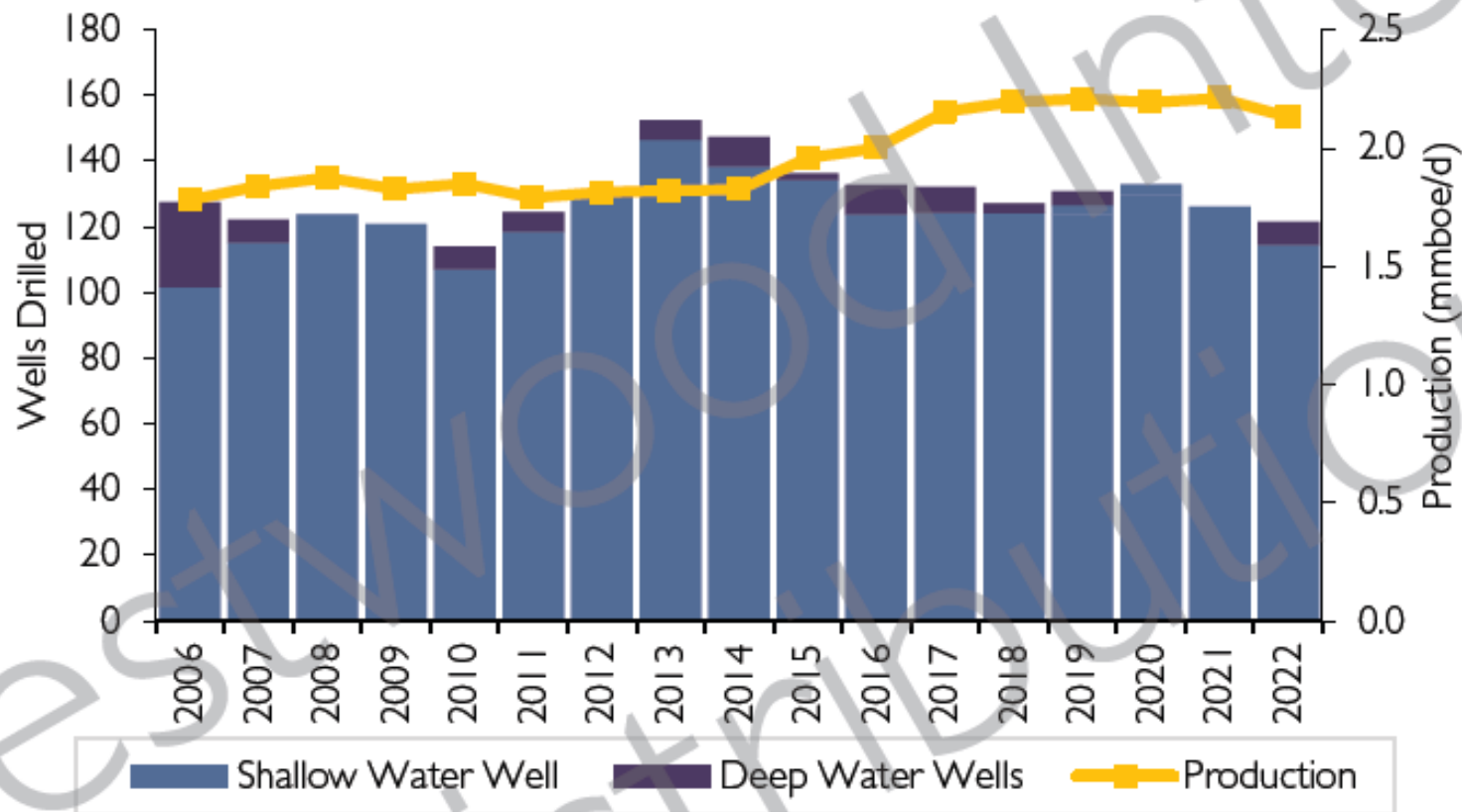


Figure 54: Malaysia Offshore Production and Drilling

Petronas are considering awarding specific EOR contracts with fiscal clauses specifically engineered to encourage the development of mature fields.

To reverse the decline, \$90bn was allocated for the upstream sector under the Economic Transformation Programme.

Indonesia – Offshore Drilling and Production Q1 2016

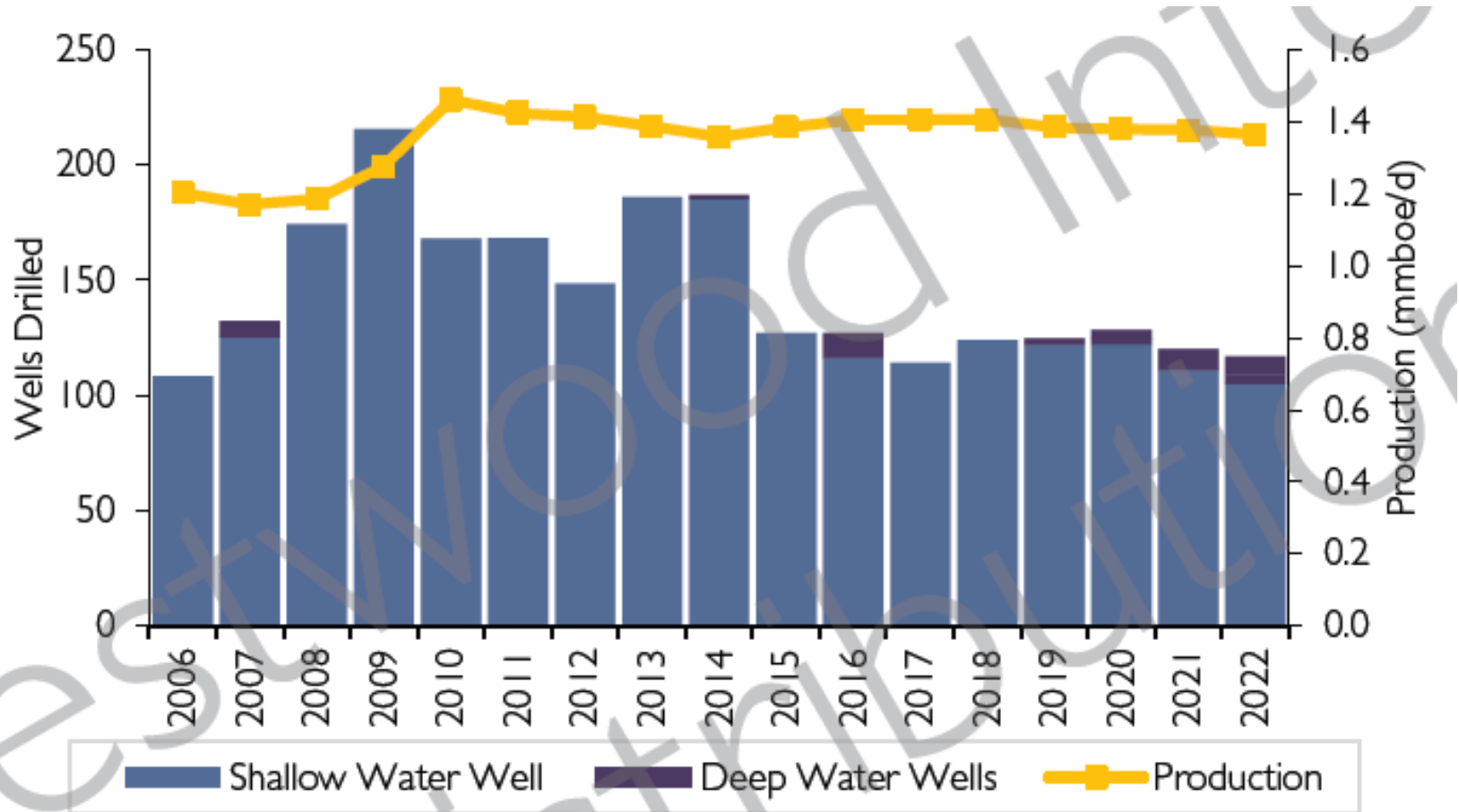


Figure 53: Indonesia Offshore Production and Drilling

Gas production is expected to plateau at around 1.4 mmboe/d, with further delays expected to Chevron's IDD project. The uncertainty in Indonesian regulations and lack of infrastructure pose key risks for upstream activities.

Thailand – Offshore Drilling and Production Q1 2016

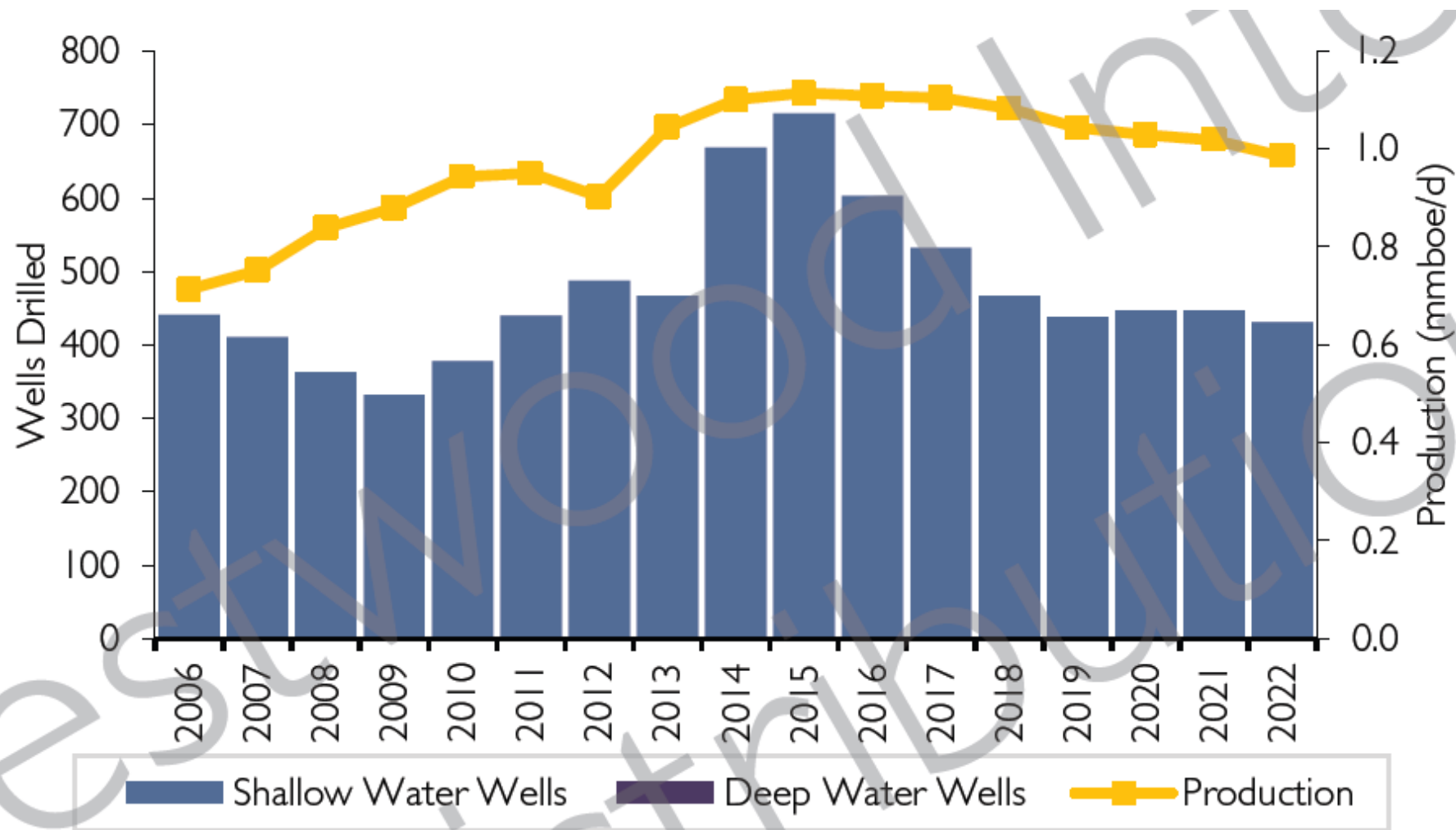


Figure 59: Thailand Offshore Production and Drilling

China – Offshore Drilling and Production Q1 2016

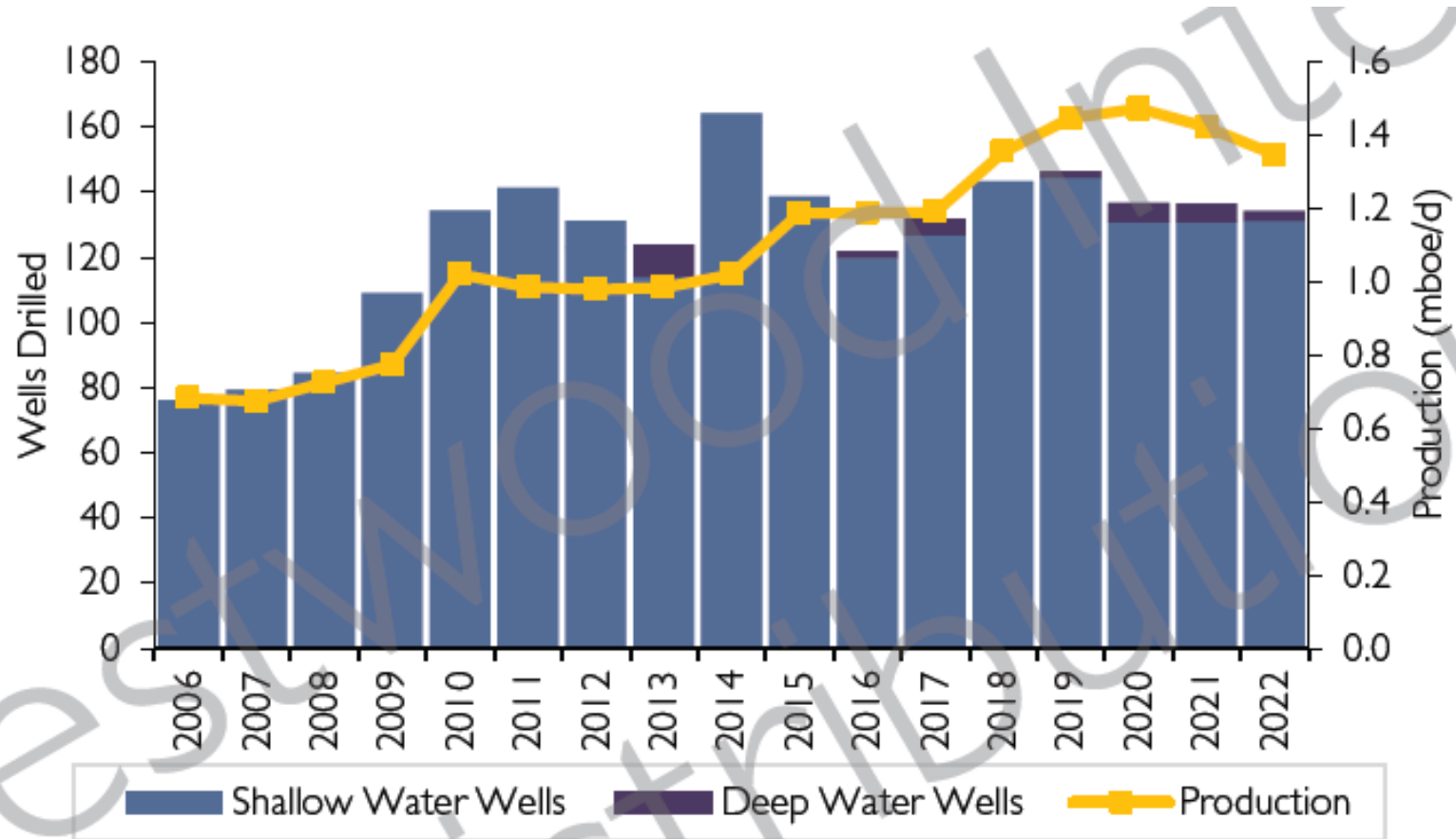


Figure 49: China Offshore Production and Drilling

Offshore, DW has downgraded its outlook for China as a result of continuing Capex cuts by CNOOC. This is expected to curtail growth from 2019 as project sanctioning decreases in the near-term.

USA – Offshore Drilling and Production Q1 2016

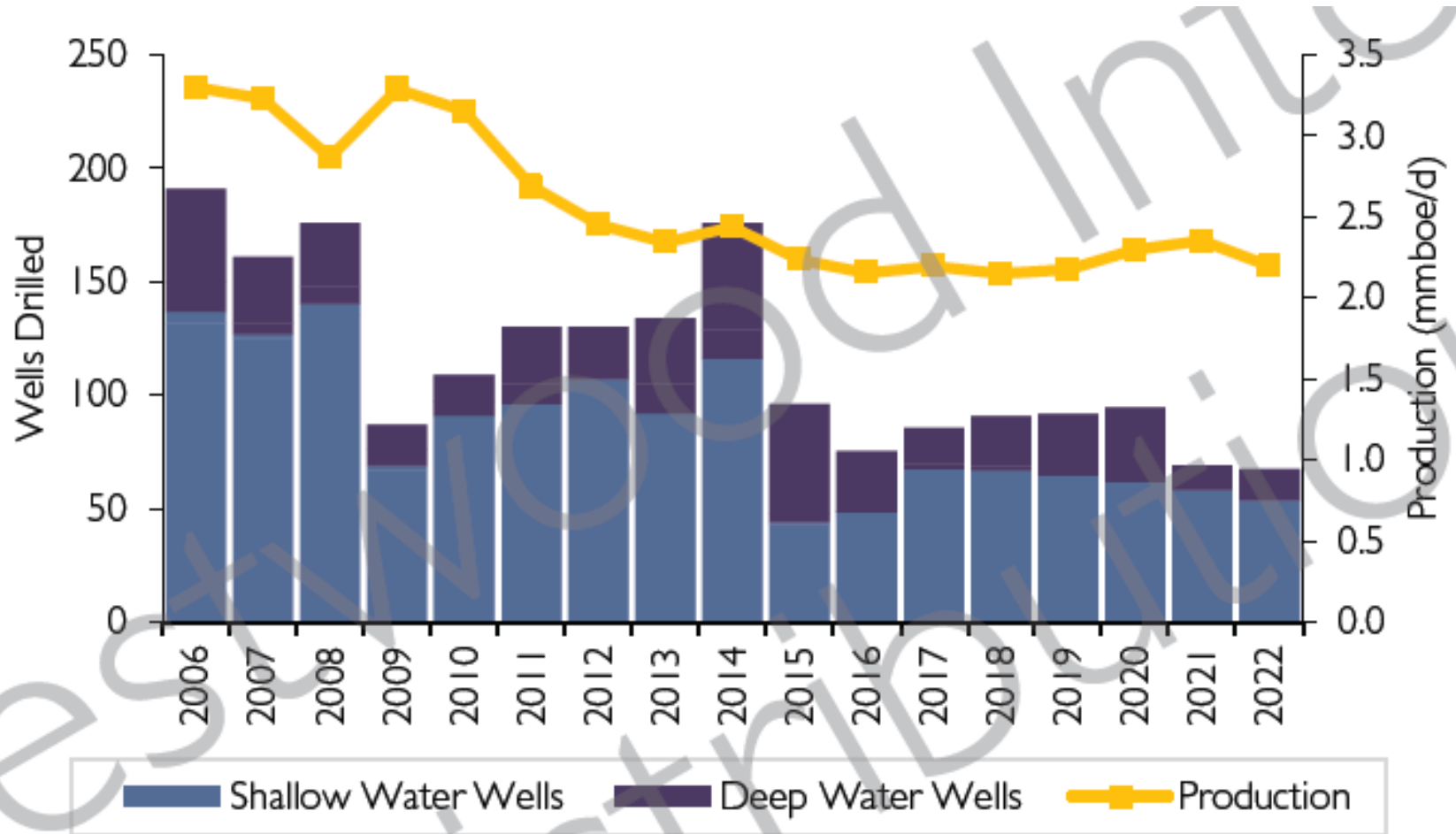


Figure 1.23: USA Offshore Production and Drilling

D

project is brought onstream shortly after Shell's Appomattox.

2

Offshore, the market downturn has led to delays and cancellations of high-cost deepwater projects

USA – Onshore Drilling and Production Q1 2016

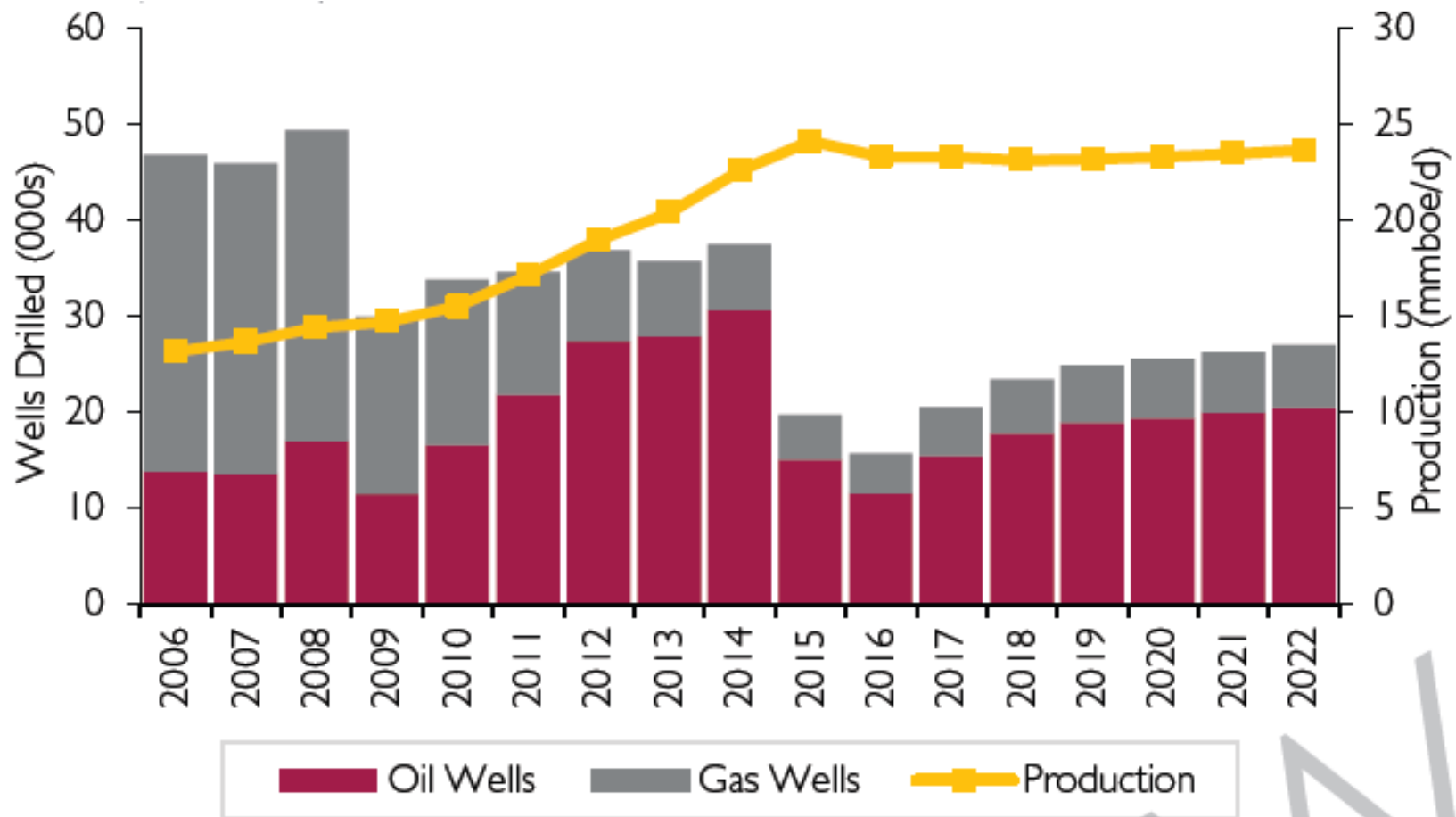


Figure 122: USA Onshore Production and Drilling

The recent drop in commodity prices has led to significant Capex reduction and bankruptcies in the USA's onshore sector, along with project cancellations and delays offshore.

Iran – Offshore Drilling and Production Q1 2016

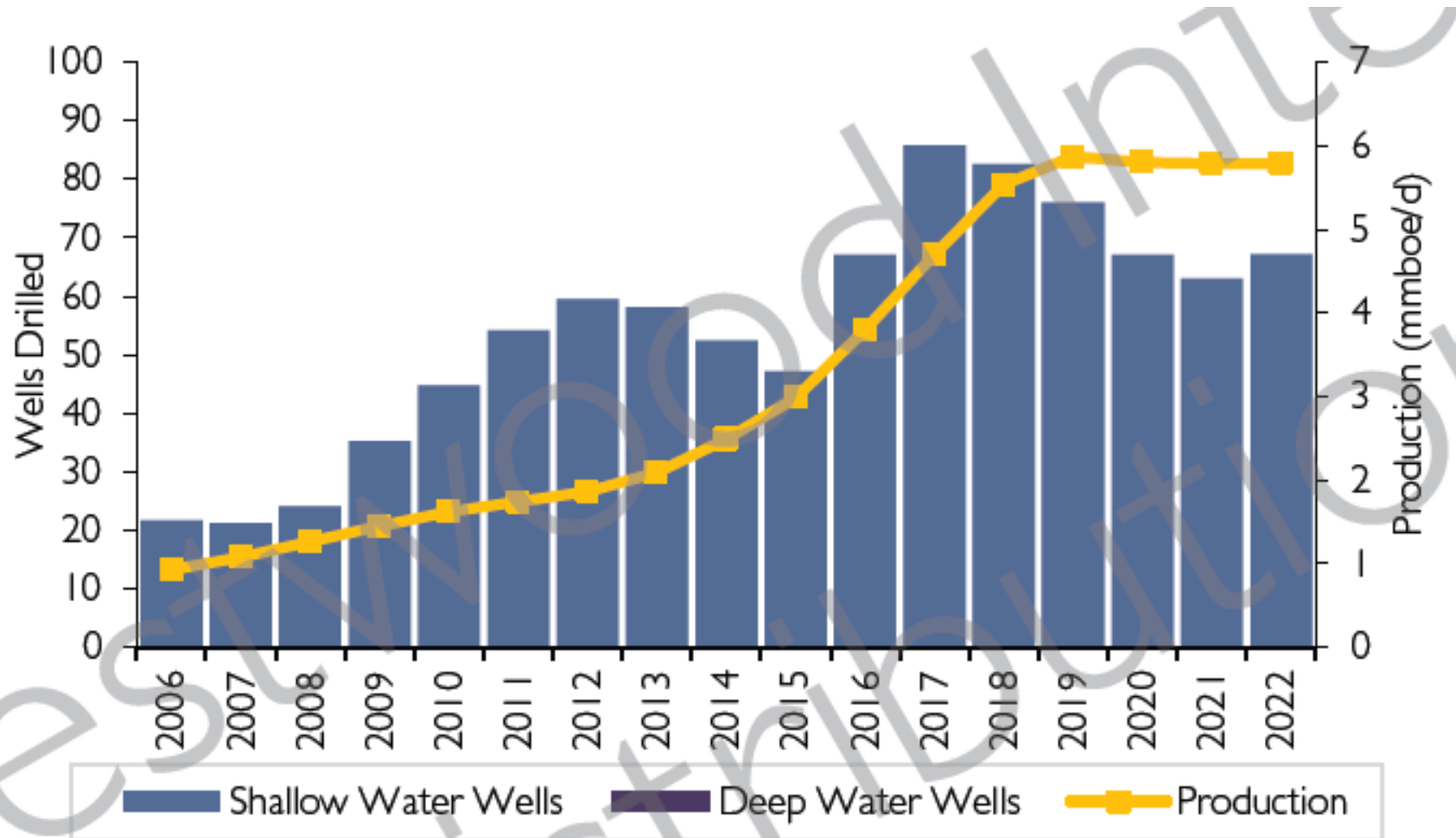
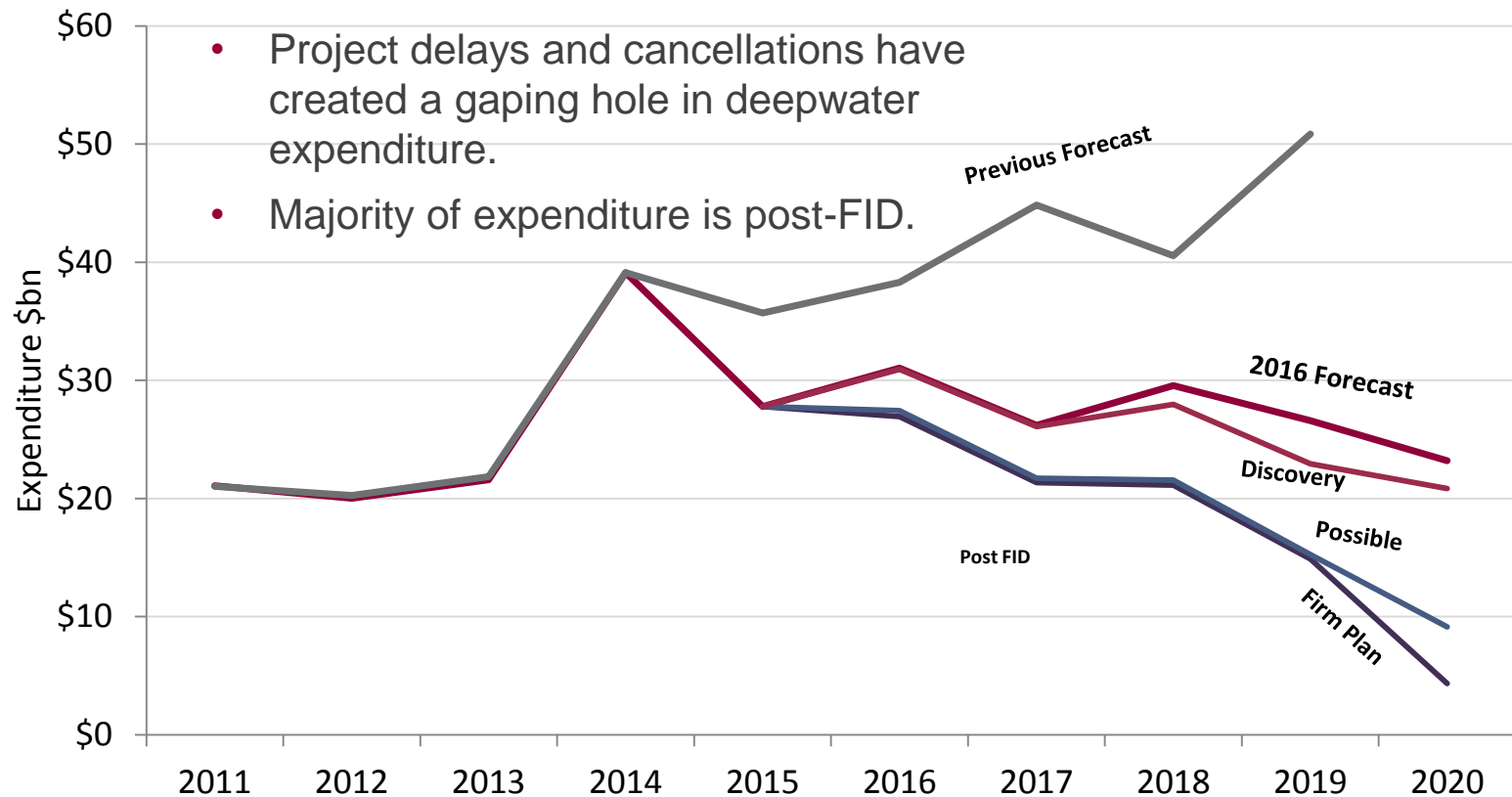


Figure 1.00: Iran Offshore Production and Drilling

DW still sees significant risk associated with investing in Iran's upstream sector – limiting oil production increases in the forecast period.

What a difference a year makes...Deepwater



	Jan 2015	Jan 2016	Change
Deepwater Prospects	210	122	-42%
Deepwater Capex	\$210bn	\$137bn	-35%



- Oil prices to remain low for H1 2016 before moving upward in H2.
- 0.7 mmbbl/d reduction in oversupply expected in 2016.
- Tough 2016- deflation to persist through 2016. Offshore budget revisions and renegotiations expected, but opportunity to innovate and refresh the industry.
- Things could change very quickly, we just can't predict external factors.



Thank you

www.douglas-westwood.com

See me for a copy of this
presentation

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