

Norwegian oil and gas

Market and industry outlook

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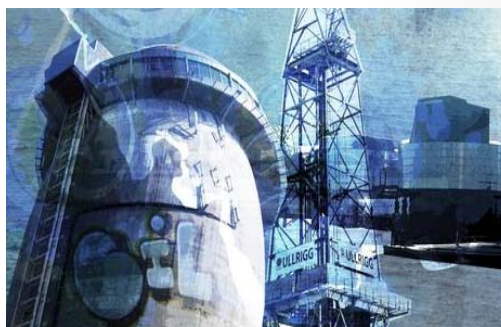


Norwegian Petroleum Society
Stavanger, 19 May 2015

Key messages

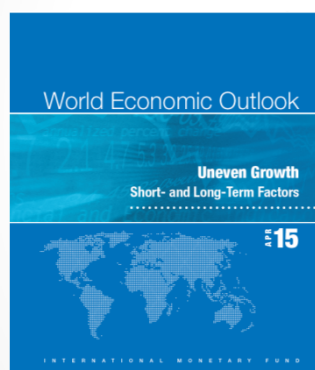
Check list

- The oil price matters
- The nature of the oil shock matters
- Market imperfections matter
- Resource scarcity matters



World Economic Outlook

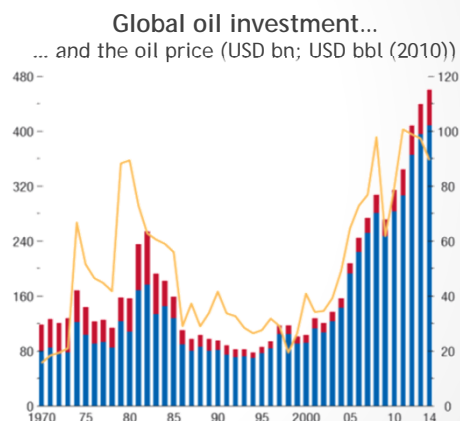
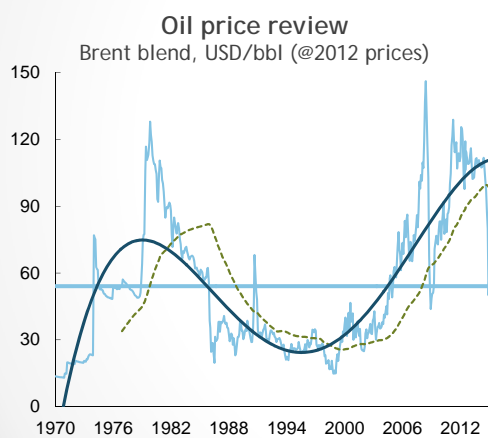
Uneven global recovery continues, downside risks prevail



- GDP forecast downgraded
 - China, Russia, Euro area, Japan
 - Major oil exporters
- Rebound suspended - again
 - A classical post-crisis pattern
- Risks are more balanced
 - Financial market risk
 - Secular stagnation
 - Boost from lower oil prices

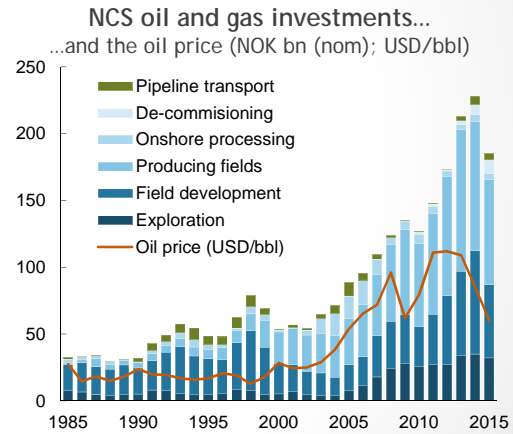
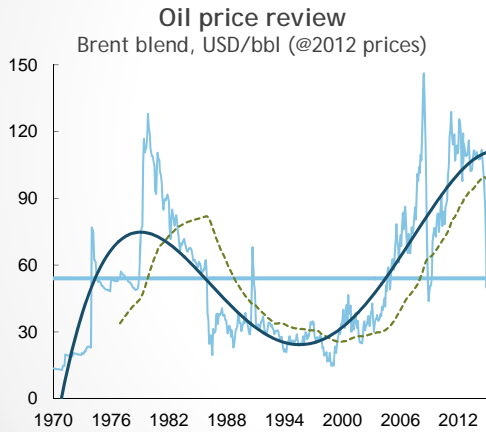
The oil price matters...

... for investment



The oil price matters...

... for investment



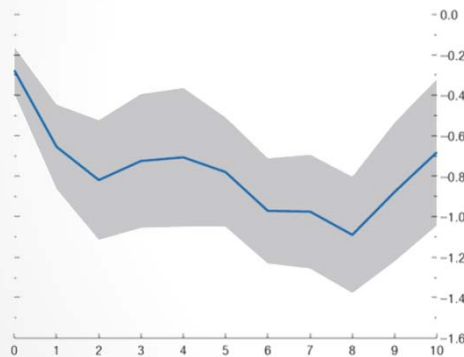
Source: International Monetary Fund. *World Economic Outlook*. April 2015. Statistics Norway.

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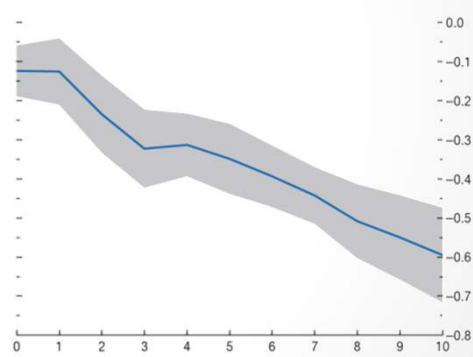
The oil price matters...

... for investment - and for production

Oil investment response to an oil price drop
Impulse response in per cent (elasticity)



Oil production response...
... to a 1% drop in investment (elasticity)

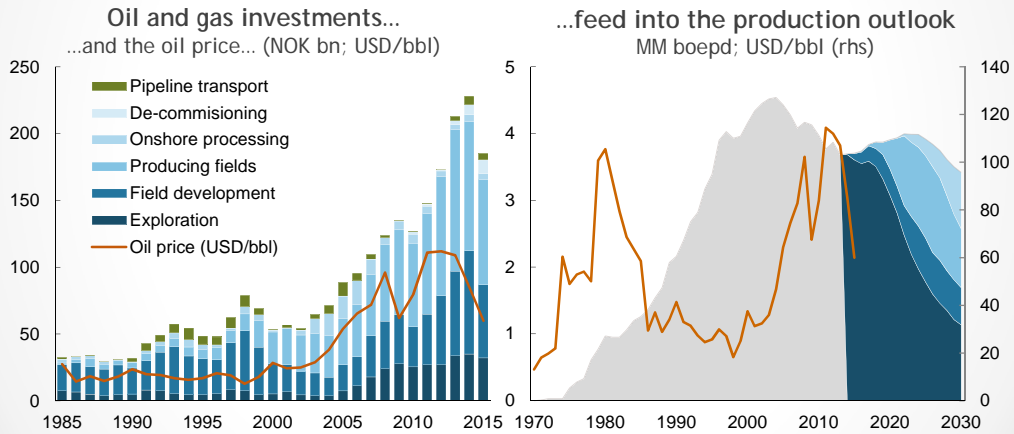


Source: International Monetary Fund. *World Economic Outlook*. April 2015.

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The oil price matters...

... for production

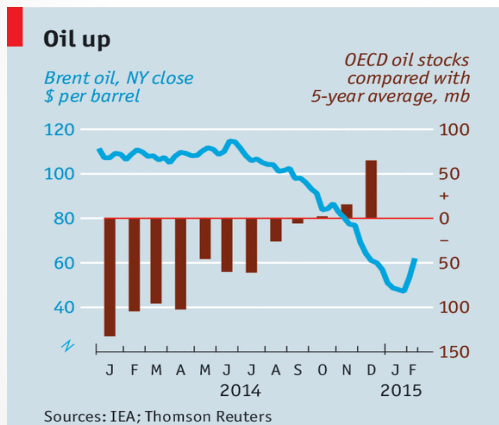


Source: Statistics Norway, Norwegian Petroleum Directorate.

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The great plunge in oil prices

Deepest drop since 2008, and hardly as temporary, ... or (?)



Sources: IEA; Thomson Reuters



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The great plunge in oil prices

Causes, consequences, and policy responses

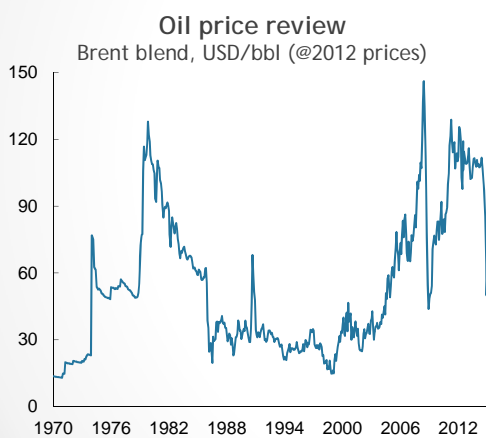


- Developments in demand and supply
- Changes in OPEC objectives
- Geopolitical developments
- Appreciation of the USD
- Speculative demand and inventory management

Source: World Bank (2015). The great plunge in oil prices. Causes, consequences, and policy responses. *Policy Research Note* 15/01. March.

The great plunge in oil prices

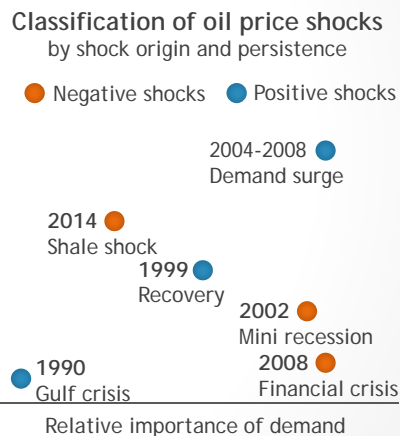
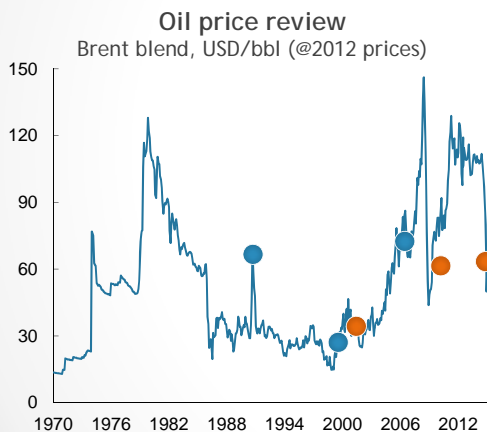
The nature of the oil price shock is decisive for its impact



- The source of the shock
 - Demand
 - Supply
- Persistence
 - Temporary shock (cyclical)
 - Permanent shock (structural)

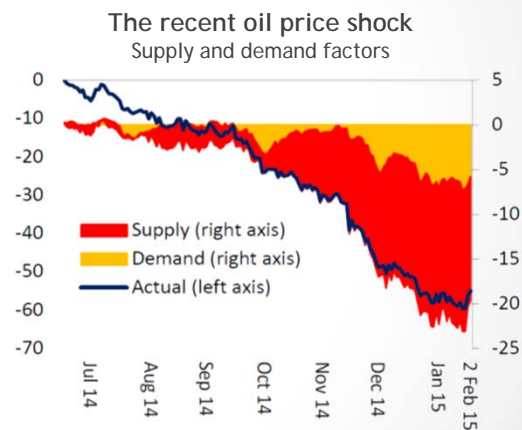
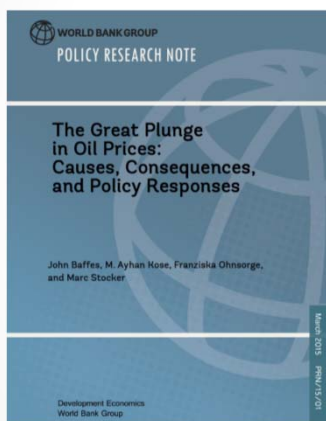
The great plunge in oil prices

The nature of the oil price shock is decisive for its impact



The great plunge in oil prices

Largely supply-driven, but not entirely...



Source: World Bank (2015). The great plunge in oil prices. Causes, consequences, and policy responses. Policy Research Note 15/01. March.

Oil industry in distress

Pressures were building ahead of the oil price plunge

November 2013



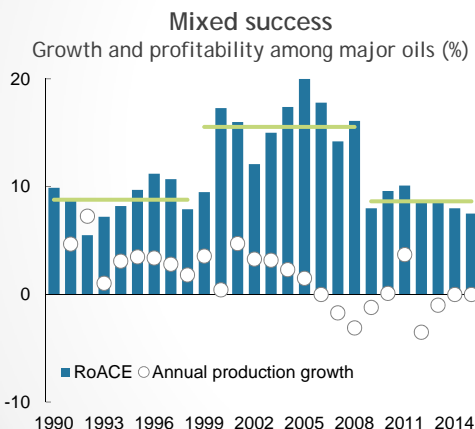
April 2014



Sources: Mohn, K. 2014. Kva skjer med oljeinvesteringane? Samfunnsøkonomen 2/2014, 10-14.

Oil industry in distress

Short-term challenge: Profitability and investment returns



- Disappointed shareholders
 - Returns eroded by spending, cost escalation, and oil price stagnation
- Diverging market views...
 - ... and valuations
- Disputed business model
 - Scarcity and access
 - Stranded assets

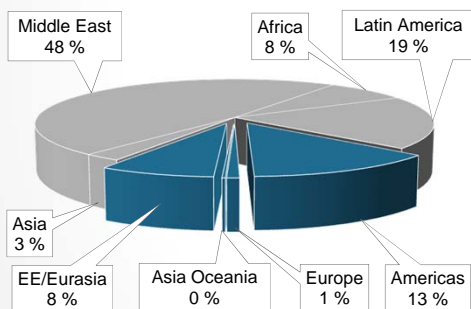


*Sources: Deutsche Bank, UBS Warburg.

Oil industry in distress

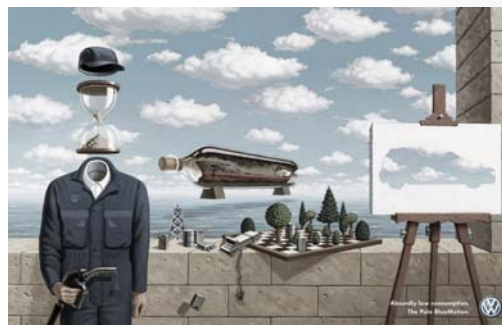
Longer term challenge: Growth

Constraints on access and supply
Proven oil and gas reserves by global region



Source: IEA (2014), *World Energy Outlook*.

Constraints on demand
Policies, preferences, and prices



A case for cash as an investment driver

Market imperfection: Agency costs of free cash-flow

Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers
By Michael C. Jensen

Journal of Economic Perspectives - Volume 2, Number 1 - Winter 1988 - Page 31-49

Takeovers: Their Causes and Consequences
Michael C. Jensen

Jensen, M. (1986)
Agency cost of FCF...
AER 76(2)

Shifting sentiments in firm investment: an application to the oil industry
Klaus Misund and Mark Mohn

Journal of Applied Corporate Finance, 2011, 23, 168-176

Mohn and Misund (2011)
Shifting sentiments...
AFE 21

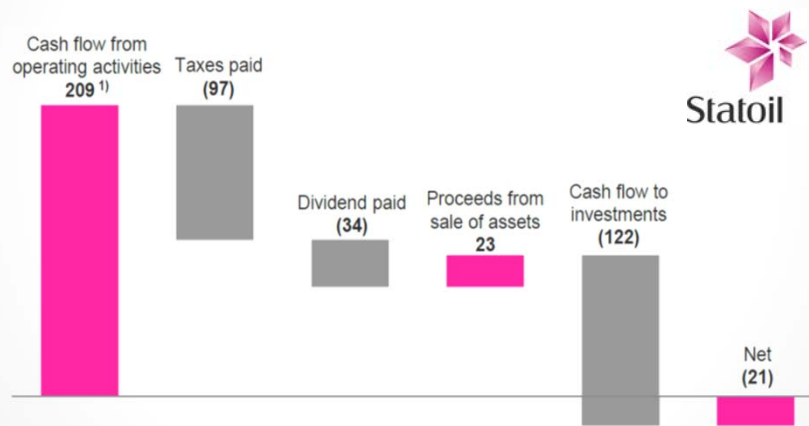
Nye kutt i kjømda frå Statoil
Statoil lynnerte alt i det nye med nye kutt i investeringsplanene. Det godte ryktet for Statoils eiere, men bløte for norsk økonomi.

Mohn, K. (2015)
Dagens Næringsliv
7 January



A case for cash as an investment driver

Statoil's cash disposal 2014 (NOK bn)



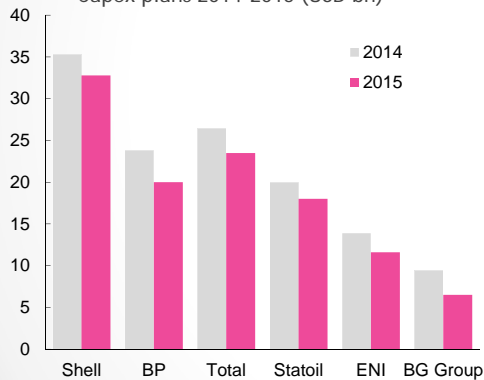
Source: <http://www.statoil.com/IR>.

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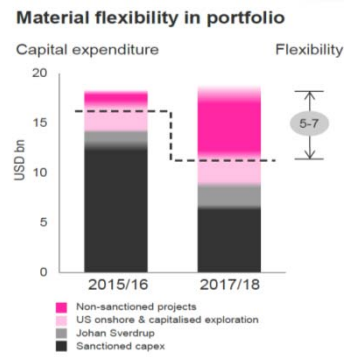
A case for cash as an investment driver

Lower investment will dampen activities - and costs

European oil majors
Capex plans 2014-2015 (USD bn)



"Prepared to use material flexibility"
Statoil, 6 February 2015

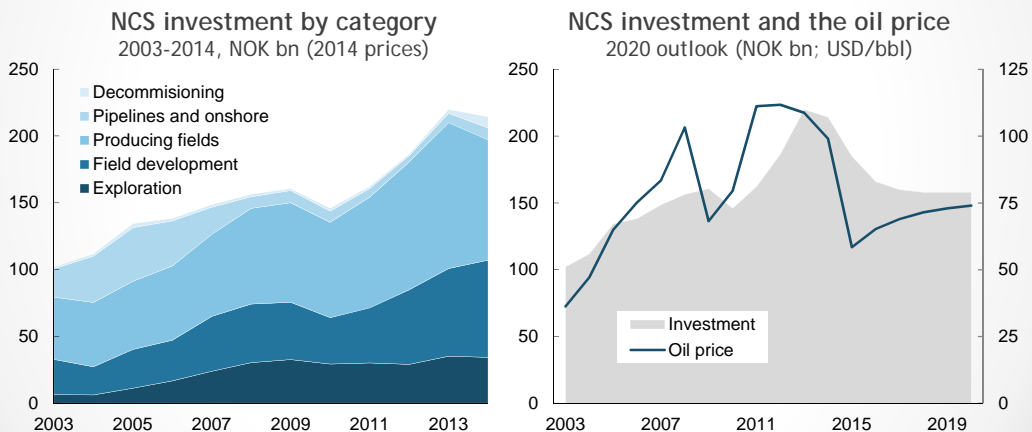


Sources: <http://www.statoil.com/IR>, Platts, Company reports.

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NCS investment outlook

Point of departure: Norges Bank March 2015 forecast (adjusted)

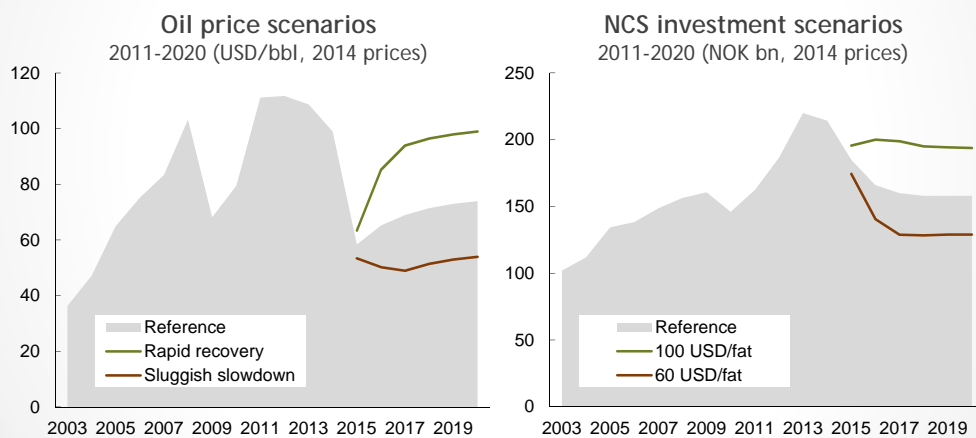


Source: Norges Bank, 2013. Pengpolitisk rapport no 1, March 2015 (historical figures). Author's calculations (outlook).

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NCS investment outlook

A scenario exercise



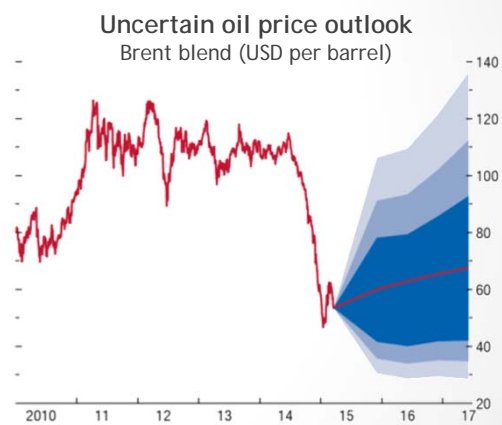
Source: Norges Bank, 2013. Pengpolitisk rapport no 1, March 2015 (historical figures). Author's calculations (outlook).

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The tide is turning

Towards a new normal

- No growth without profit
 - Oil price increase has reversed
 - Cost adjustment is sluggish
- More challenges ahead
 - Project pipeline may dry up
 - Global warming means oil industry cooling
- Readjustment is looming



Key messages

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