Upstream Financial Review of the Global Oil and Natural Gas Industry 2013

Markets and Financial Analysis Team
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Overview

- This analysis focuses on financial and operating trends of the oil and natural gas production business segment, often referred to as upstream operations, of 42 global oil and natural gas producing companies (the upstream group).

- The data come from public financial statements each company submits to the U.S. Securities and Exchange Commission, which a data service, Evaluate Energy, aggregates for ease of data analysis.

- Some of the larger companies also have integrated (downstream, chemical, etc.) operations that are included in the company totals, as not all companies separate their sources of income or costs.

- For consistency, EIA included 2000-05 data for Norsk Hydro and Statoil pre-merger and XTO from 2000-09 to smooth out the effect of large mergers and acquisitions.
Brief description of terms

- Cash from operations is a measure of income.

- Capital expenditures represent cash used for property, plant, and equipment (investing activities).

- Financing activities measure inflows/outflows in debt or equity markets including dividends, share issuance or repurchases, and debt issuance or repayments.

- Finding costs include exploration, development, and unproved property acquisition expenditures.

- Lifting costs are the production costs to get the oil and gas out of the ground.
Global liquids production distribution for the 42 producing companies in 2013

Source: U.S. Energy Information Administration, based on Evaluate Energy database
Most companies are based in North America

number of companies

Source: U.S. Energy Information Administration, based on Evaluate Energy database
The upstream group’s liquids production represents 39% of non-OPEC production

Source: U.S. Energy Information Administration, based on Evaluate Energy database

Note: boe=barrels of oil equivalent
These companies’ liquids and natural gas production both declined year-on-year in 2013 for the first time

million barrels per day

Source: U.S. Energy Information Administration, based on Evaluate Energy database

Note: boe=barrels of oil equivalent
Cash flow declined since 2011 as crude oil prices fell

Sources: Thomson Reuters; and U.S. Energy Information Administration, based on Evaluate Energy database
2013 was the second year in a row net cash flow decreased

Source: U.S. Energy Information Administration, based on Evaluate Energy database
The upstream group outperformed the manufacturing sector until 2009, but has had comparable returns since then.

Sources: Census Bureau, Economic Report of the President; and U.S. Energy Information Administration, based on Evaluate Energy database.
Total expenditures have outpaced cash flow since 2009

billion 2013$

Source: U.S. Energy Information Administration, based on Evaluate Energy database
From 1986 to 2009, total expenditures tended to track closely with cash flow from operations.

Note: E&P expenditures includes exploration, development, production, unproved acreage, and proved acreage expenditures.

Source: U.S. Energy Information Administration, Form EIA-28 (Financial Reporting System)
Upstream expenditures by category

billion 2013$

The upstream group has increased dividends and debt since 2000

billion 2013$

A $30 billion stock float outweighed combined company share repurchases

A positive net change in debt means more debt was issued than repaid, bringing in cash

Note: Share repurchases + dividends - net change in debt ≈ Total financing activities

Source: U.S. Energy Information Administration, based on Evaluate Energy database
These companies have increased long-term debt every year since 2006

Source: U.S. Energy Information Administration, based on Evaluate Energy database
Oil reserve additions exceeded 10 billion barrels in both 2012 and 2013.

- Source: U.S. Energy Information Administration, based on Evaluate Energy database
- Note: boe=barrels of oil equivalent

![Graph showing oil reserve additions and natural gas reserve additions (boe) from 2000 to 2012.](image)

- Oil reserve additions
- Natural gas reserve additions (boe)

- Oil sands reserves included
- Natural gas price decline

![2013 Upstream Financial Review](logo)
Increased finding of reserves and flat production led to reserve replacement ratios of over 100% since 2008.

Note: The reserve replacement ratio indicates whether the company added sufficient reserves to replace the amount produced in a given year.

Exploration and development costs have driven up the total per-barrel cost

2013$ per barrel of oil equivalent

Note: Finding costs are the ratio of unproved property acquisition and exploration and development expenditures to reserve additions. Lifting costs are the ratio of production expenditures to the amount of oil/gas produced.

5yma=five-year moving average

Source: U.S. Energy Information Administration, based on Evaluate Energy database
## Appendix: List of companies included in this analysis

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<tr>
<th>Anadarko Petroleum Corp.</th>
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<th>Murphy Oil Corporation</th>
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<td>Canadian Natural Resources Limited</td>
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<td>Chesapeake Energy Corp.</td>
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<td>Denbury Resources Inc.</td>
<td>Marathon Oil Corp.</td>
<td>SM Energy Company</td>
<td>XTO</td>
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</tbody>
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Note: Norsk Hydro and XTO data only included in years before their respective mergers
Source: U.S. Energy Information Administration, based on Evaluate Energy database