

# Financial Review of the Global Oil and Natural Gas Industry: Second-quarter 2016



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*Markets and Financial Analysis Team*

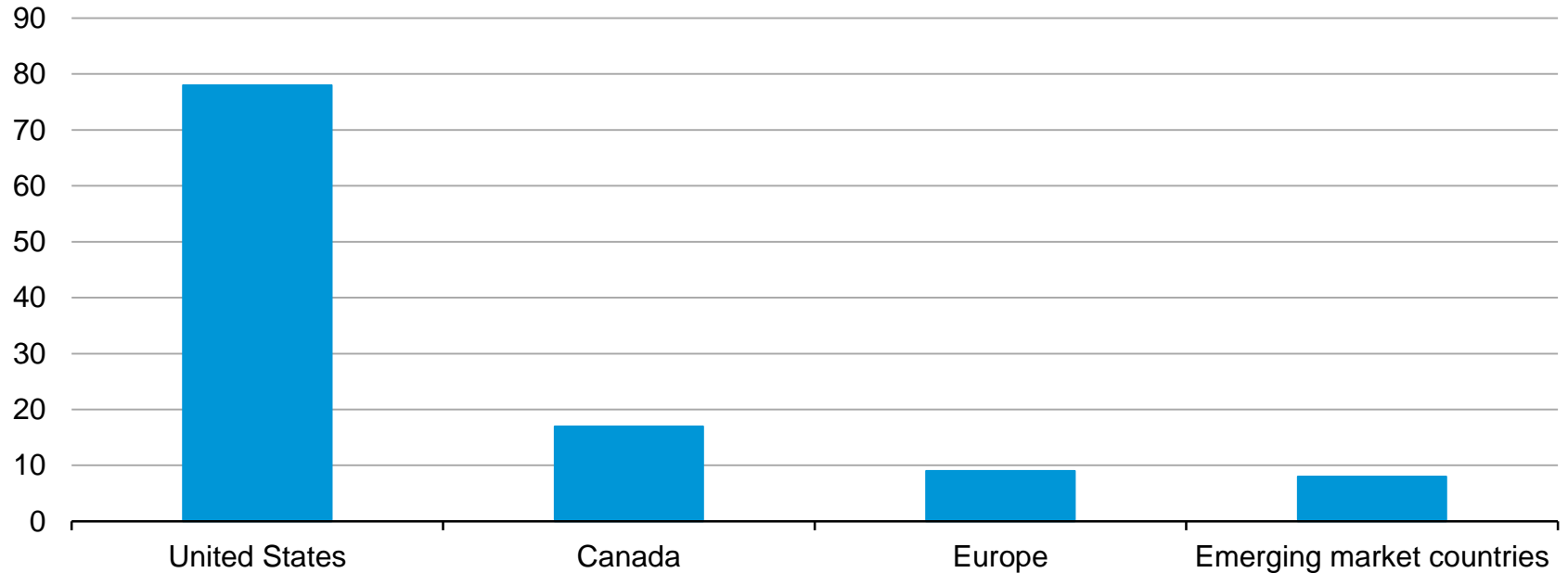
*September 2016*

## Key findings for second-quarter 2016

- Brent crude oil prices increased from first-quarter 2016, but averaged 27% below second-quarter 2015 prices.
- Reductions to capital expenditure contributed to a decline in production (liquids and natural gas combined), the first annual decline in the 2012-16 period.
- Many companies were able to balance their capital expenditure with cash from operations.

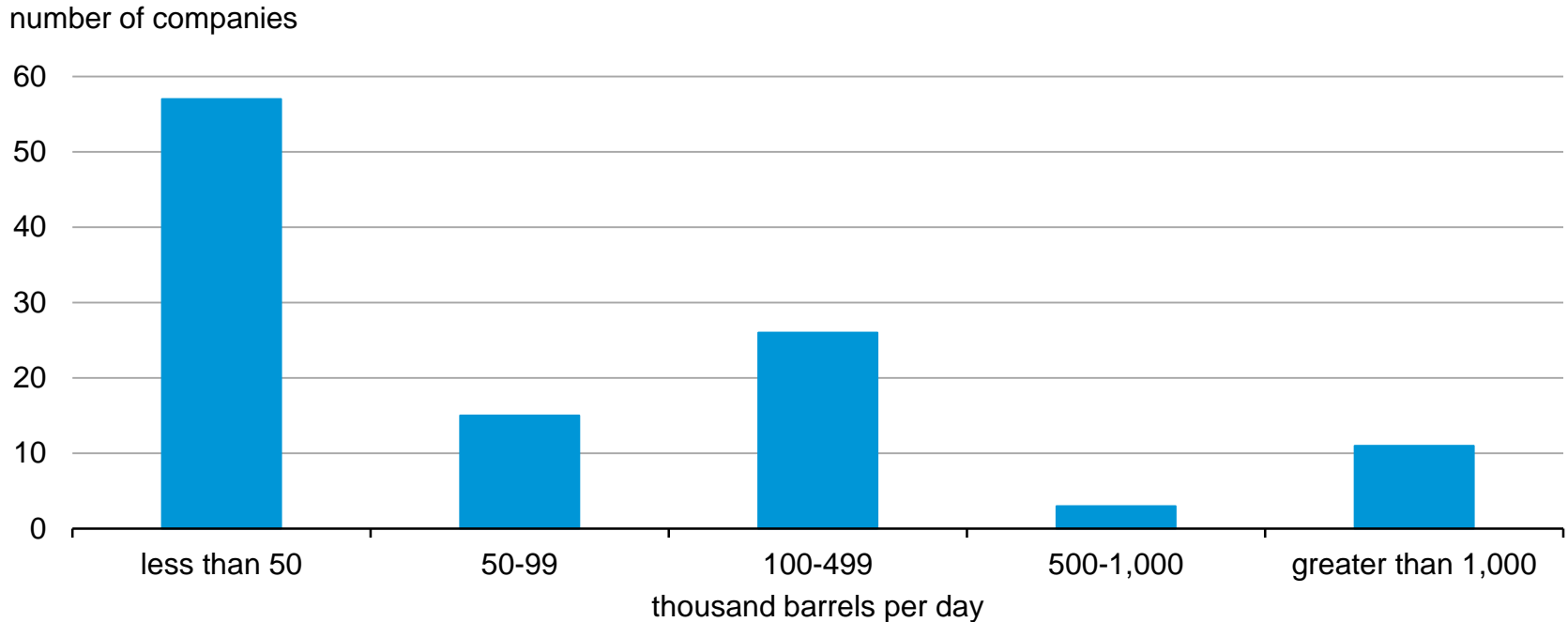
# Geographic distribution of global oil and natural gas companies, second-quarter 2016

number of companies



Source: U.S. Energy Information Administration, *Evaluate Energy*

# Distribution of global companies by production of petroleum liquids, second-quarter 2016

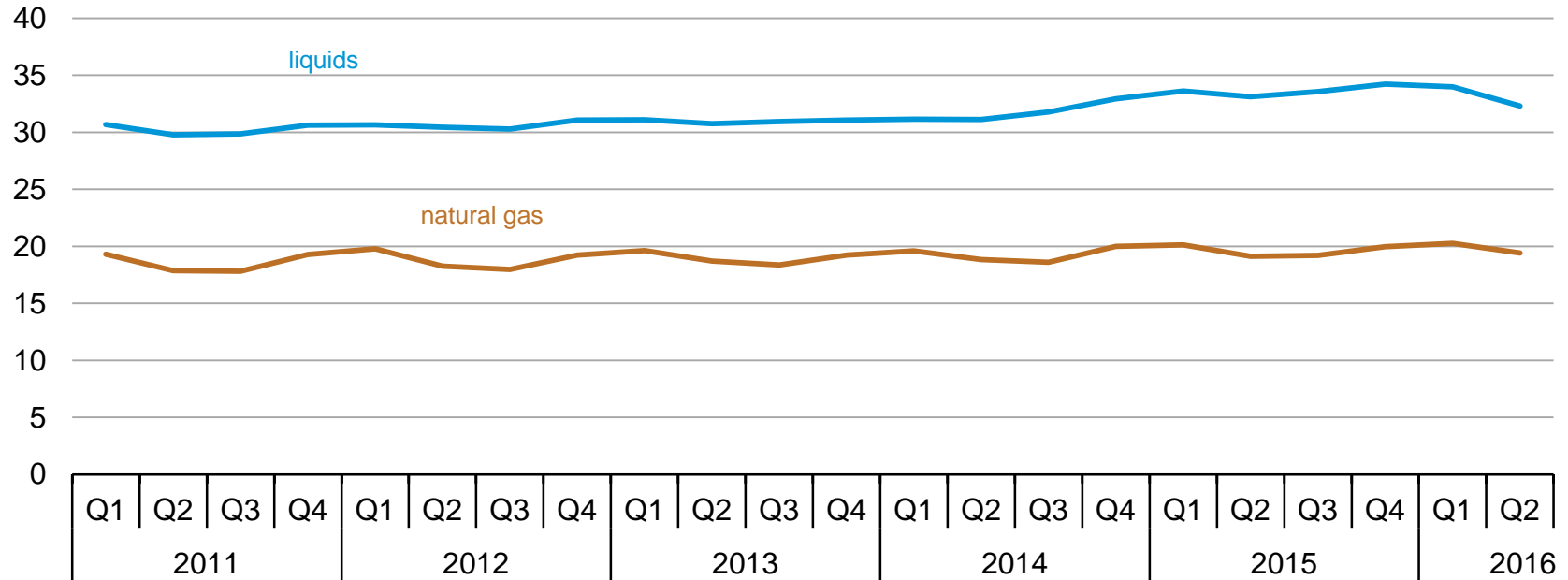


Source: U.S. Energy Information Administration, *Evaluate Energy*

# Production from global oil and natural gas companies

oil and natural gas production

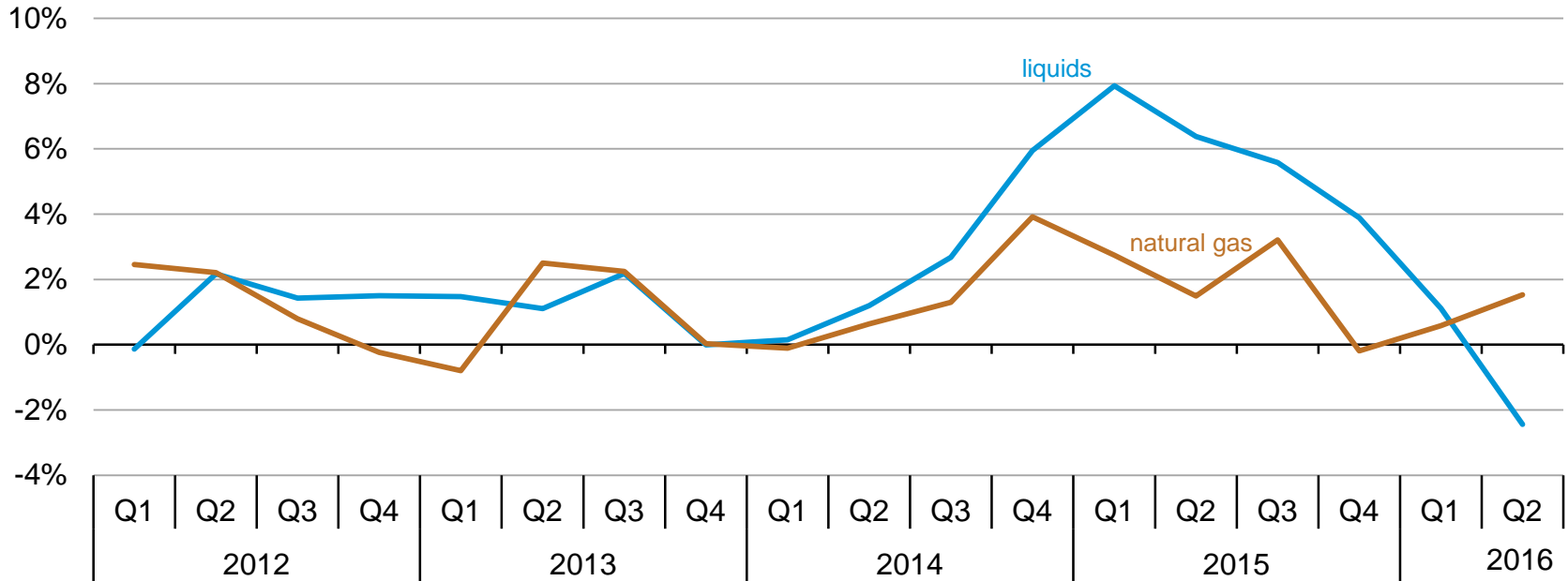
million barrels of oil equivalent per day



Source: U.S. Energy Information Administration, Evaluate Energy

# Global liquids production in second-quarter 2016 decreased 2.4%, and natural gas production increased 1.5%

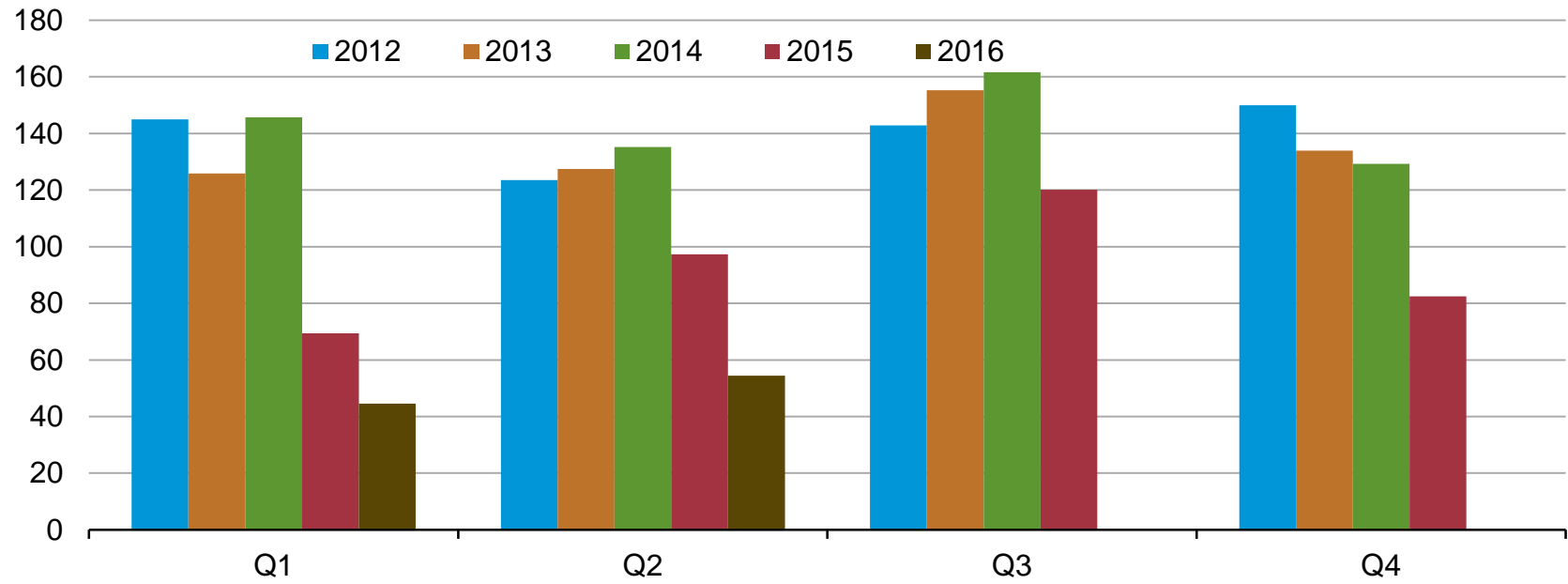
oil and natural gas production  
year-over-year change



Source: U.S. Energy Information Administration, Evaluate Energy

# Operating cash flow for these companies declined 44% from second-quarter 2015 to \$54 billion in second-quarter 2016

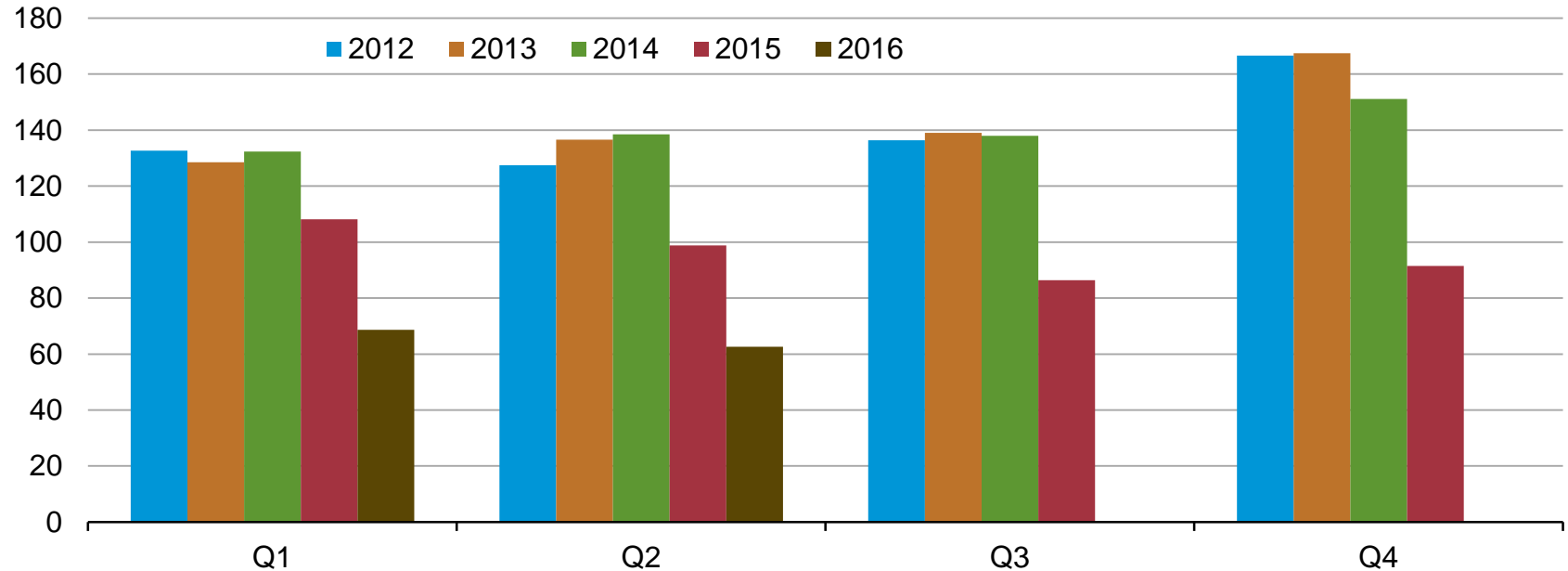
cash from operations  
billion 2016\$



Source: U.S. Energy Information Administration, Evaluate Energy

# Capital expenditure in second-quarter 2016 totaled \$63 billion, 37% lower than in second-quarter of 2015

capital expenditure  
billion 2016\$

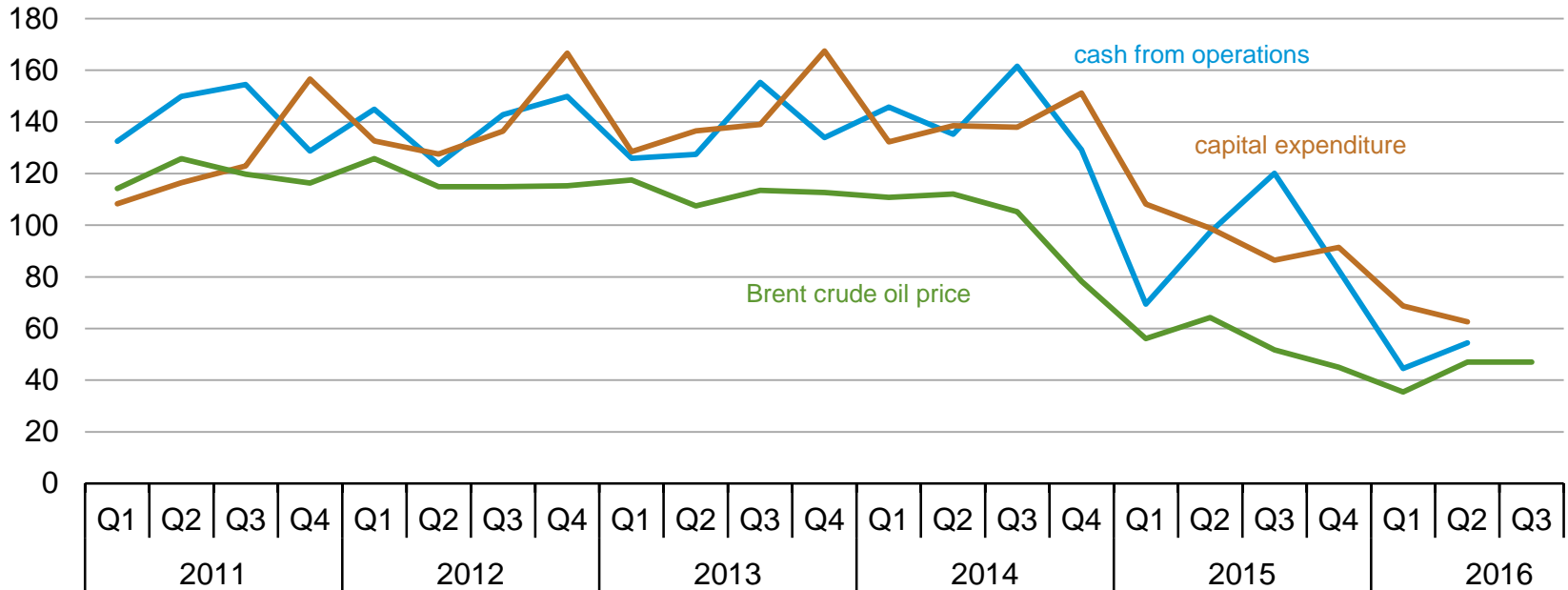


Source: U.S. Energy Information Administration, Evaluate Energy



# Investment and cash flow declines slowed as crude oil prices stabilized

cash flow items and Brent price  
billion 2016\$; Brent in 2016 \$/b

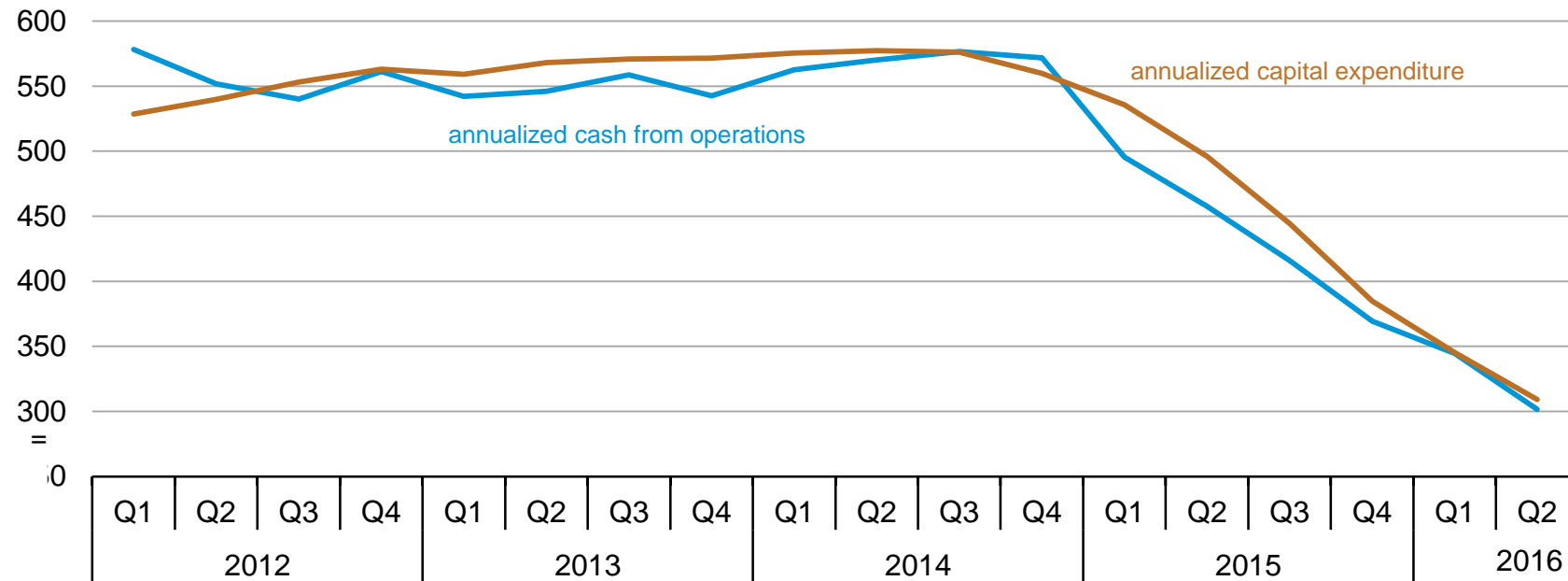


Source: U.S. Energy Information Administration, Evaluate Energy, Bloomberg

Note: b=barrel

# Cash flow and capital expenditures have been about the same amount for the four quarters ending June 30, 2016

annualized cash flow items  
billion 2016\$

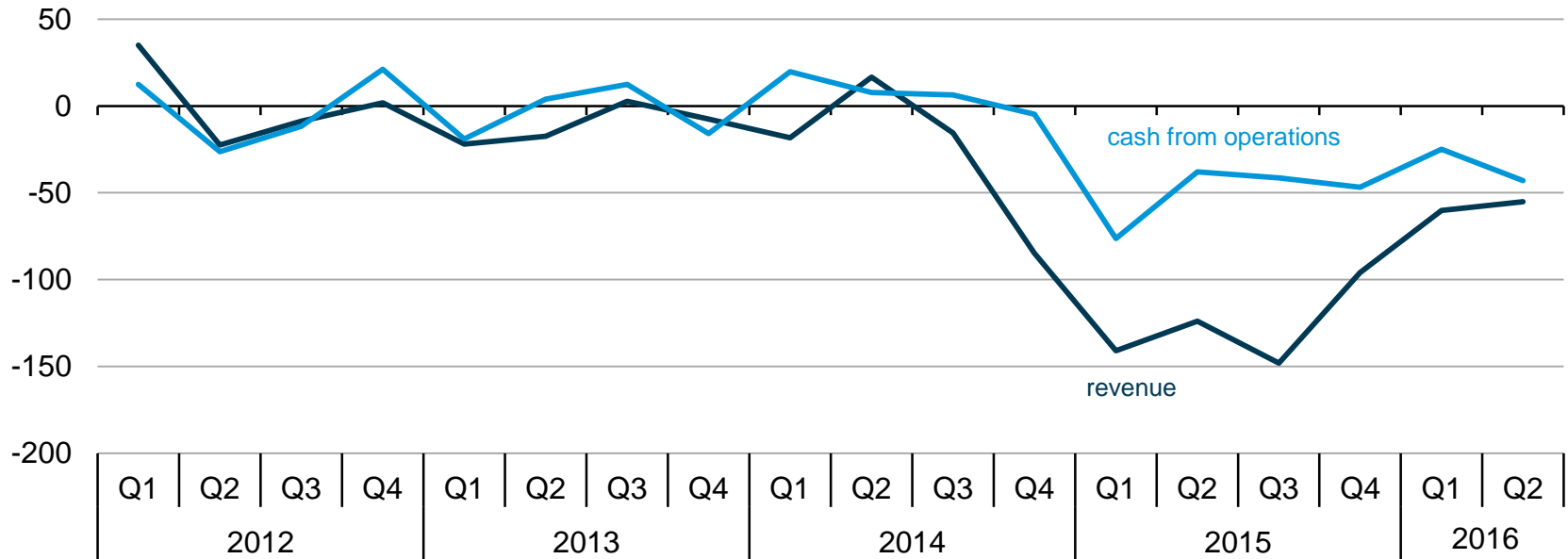


Source: U.S. Energy Information Administration, Evaluate Energy

# Cash from operations declined less than revenue, suggesting these companies are achieving operational efficiencies and lowering costs

cash flow and revenue

year-over-year change, billion 2016\$

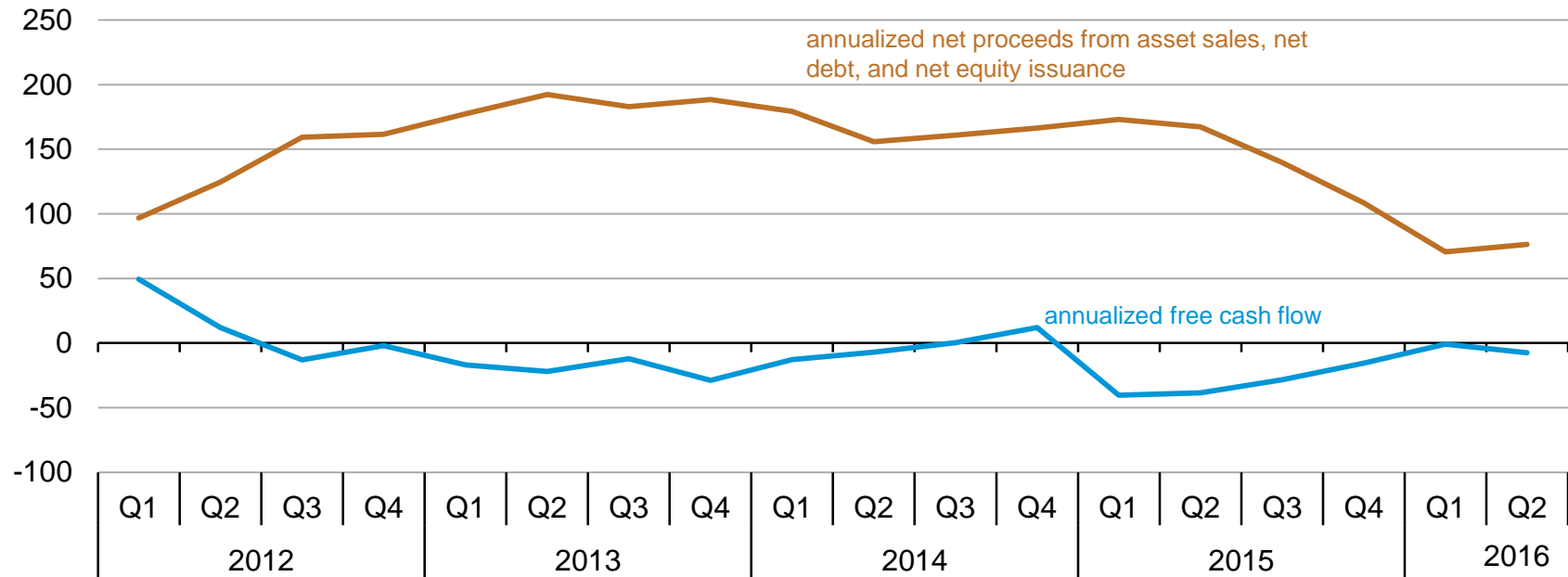


Source: U.S. Energy Information Administration, Evaluate Energy

Note: cash from operations is revenue less operating costs and taxes, excluding depreciation

# The companies raised \$76 billion from asset sales, debt issuance, and equity issuance for the four quarters ending June 30, 2016

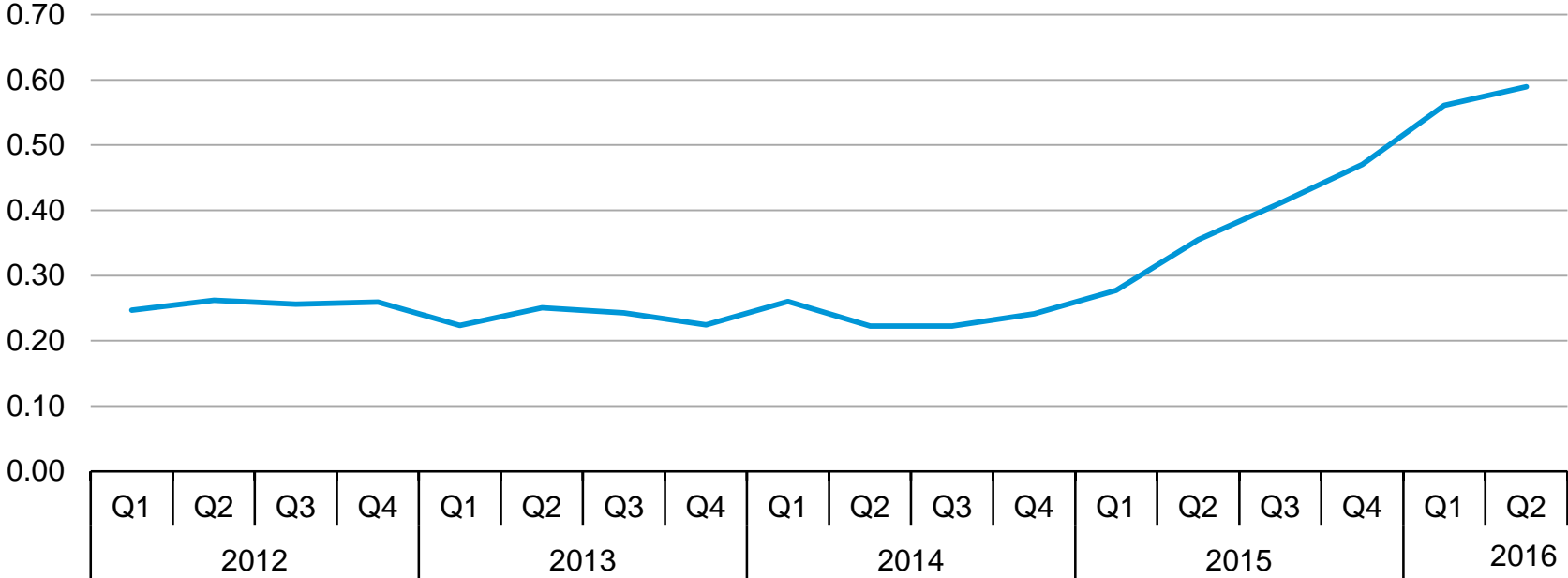
annualized cash flow items  
billion 2016\$



Source: U.S. Energy Information Administration, Evaluate Energy  
Note: free cash flow=cash from operations minus capital expenditure

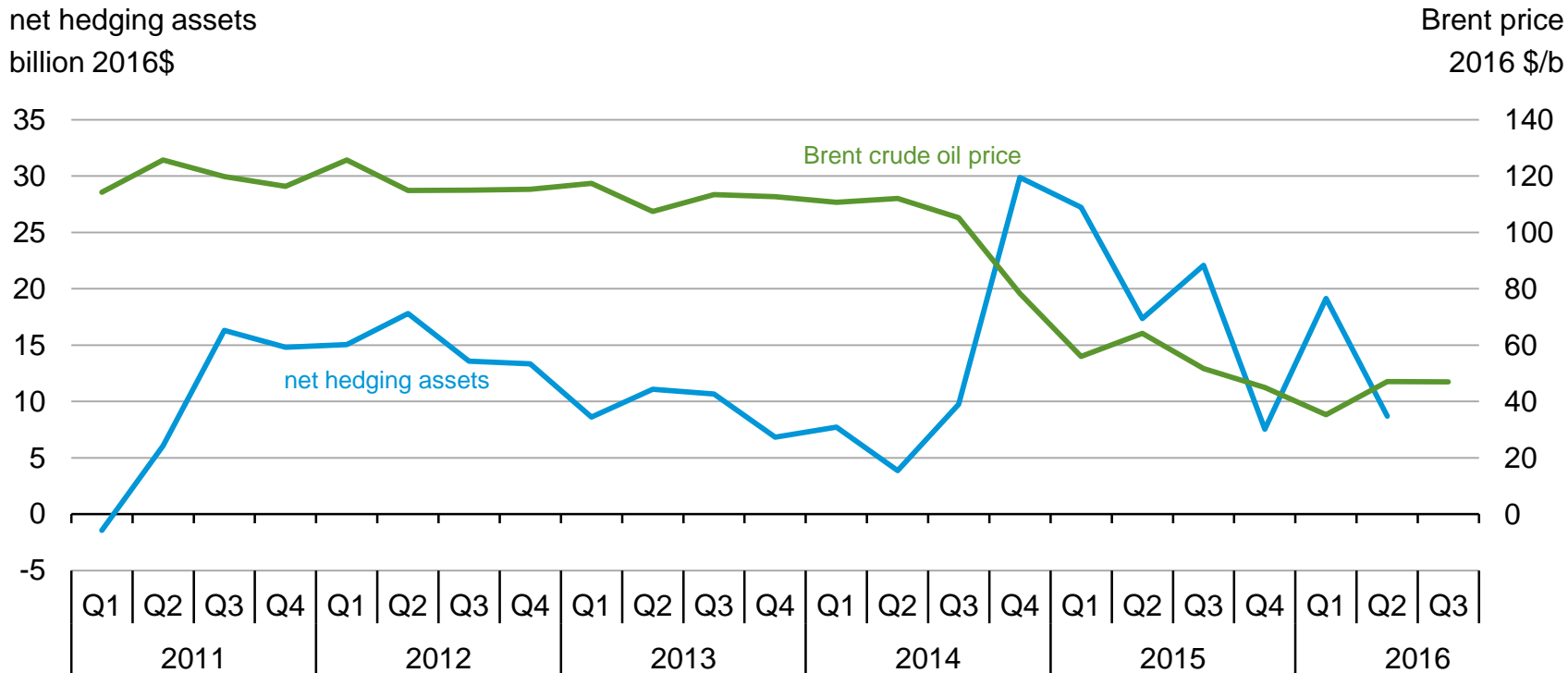
# Debt servicing payments as a share of operating cash flow increased as cash flow declined and companies refinanced

Annualized debt repayments to cash flow ratio



Source: U.S. Energy Information Administration, Evaluate Energy

# Net hedging assets, which tend to increase in value when oil prices decline, decreased \$10.4 billion from first-quarter 2016 to second-quarter 2016



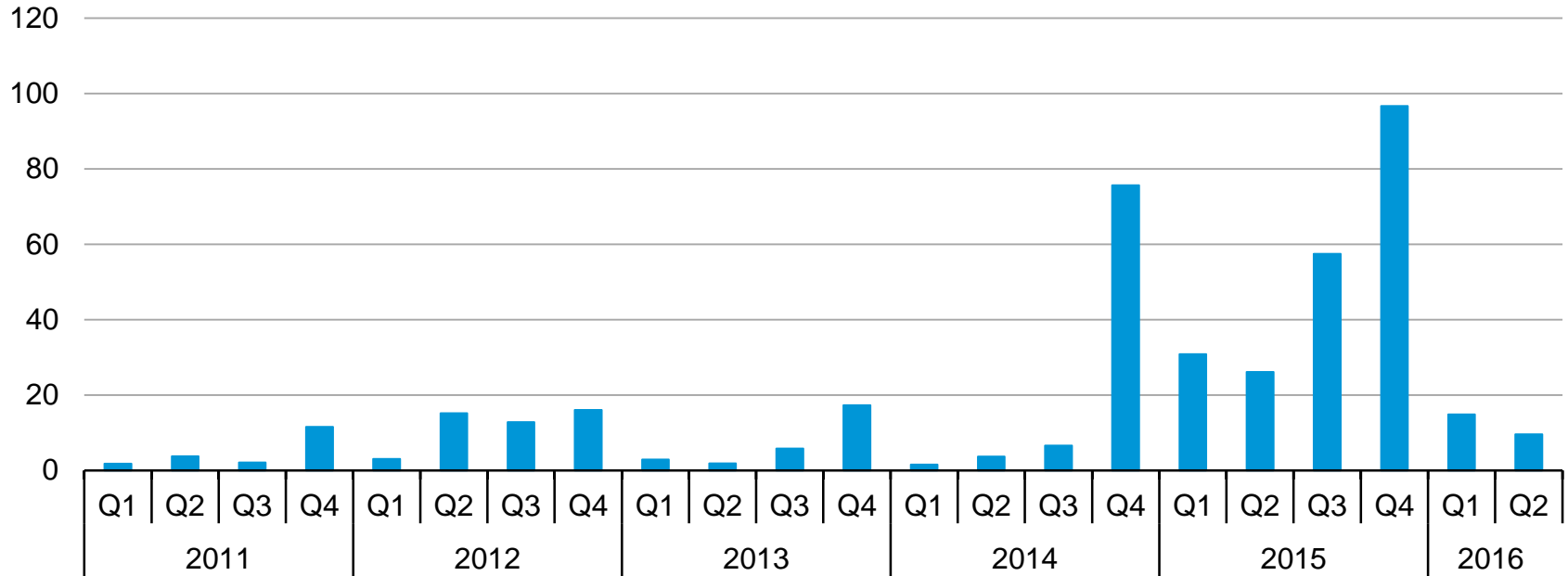
Source: U.S. Energy Information Administration, Evaluate Energy, Bloomberg

Note: b=barrel

# Asset write-downs fell to \$9.5 billion in second-quarter 2016, \$16.5 billion below second-quarter 2015

asset write-downs (impairment charges)

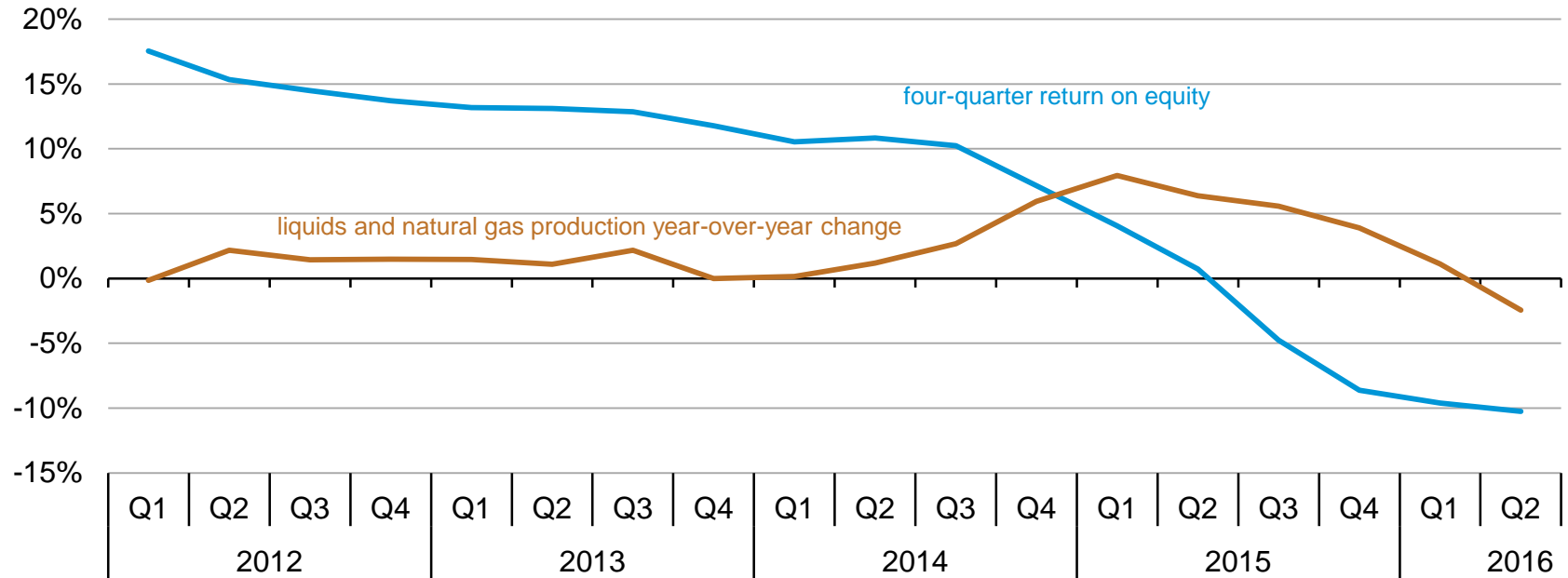
billion 2016\$



Source: U.S. Energy Information Administration, Evaluate Energy

# Falling profits for these companies contributed to liquids and natural gas production declines

profitability and production

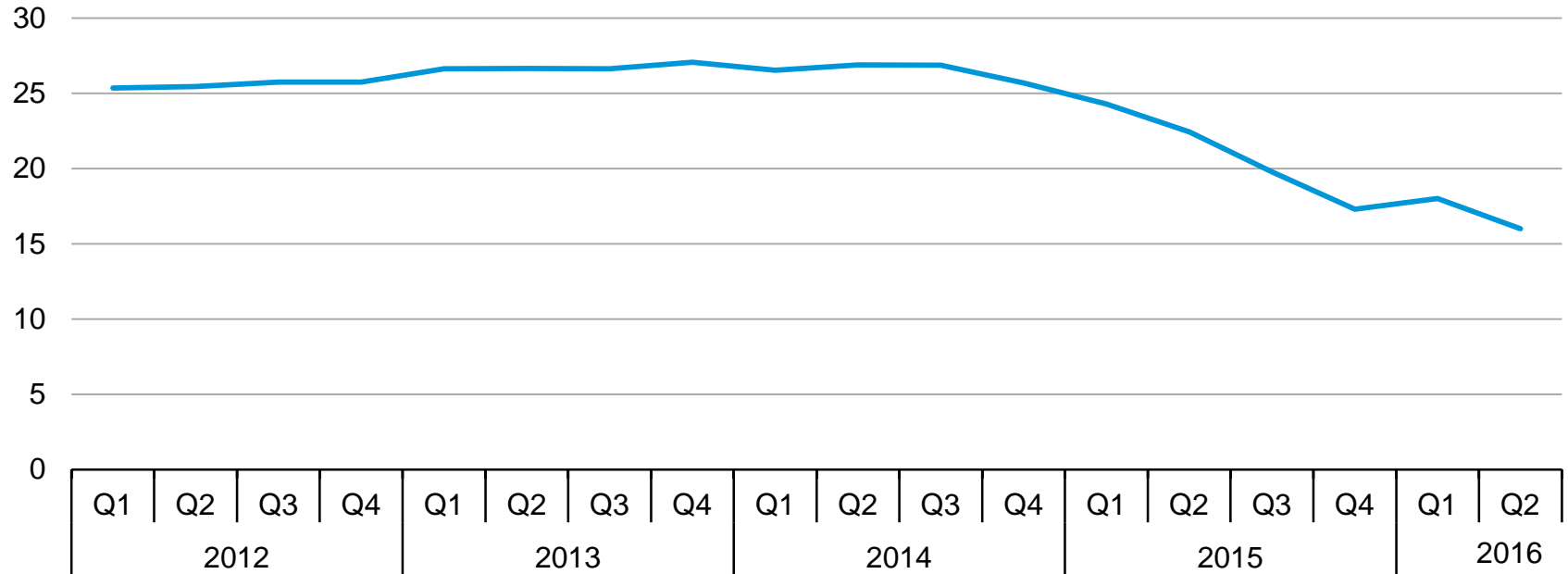


Source: U.S. Energy Information Administration, Evaluate Energy



# Upstream investment on a per-barrel basis is the lowest since at least 2012

upstream capital expenditure per barrel of oil produced  
2016 \$/boe four-quarter moving average

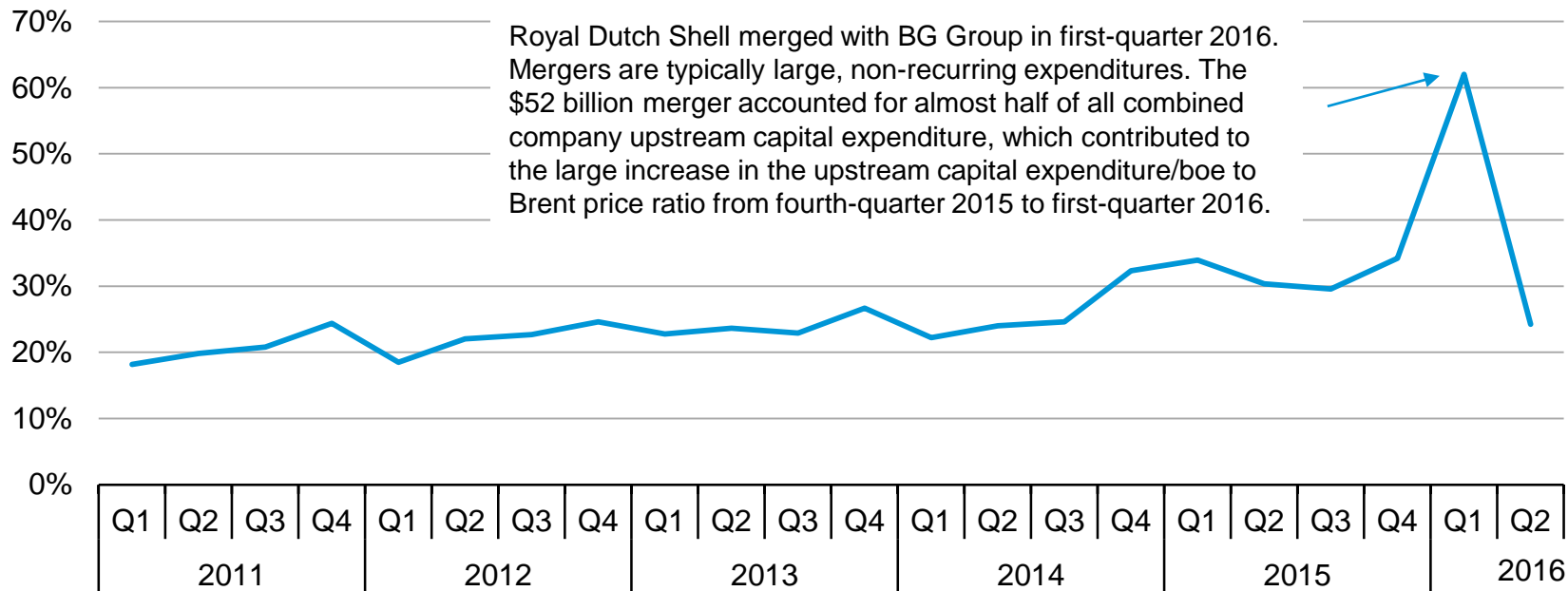


Source: U.S. Energy Information Administration, Evaluate Energy

Note: boe=barrel of oil equivalent

# The ratio of upstream capital expenditures to Brent prices fell to 25% in second-quarter 2016, similar to the ratio in 2012-14

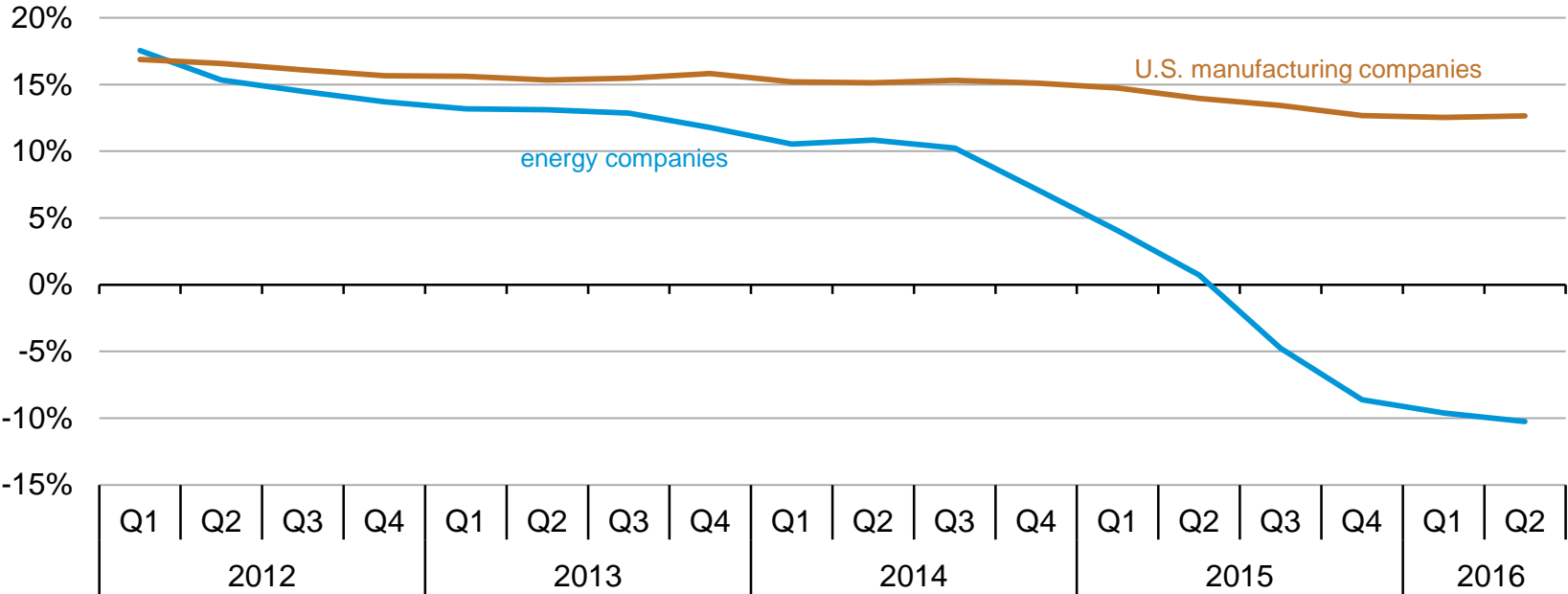
ratio of upstream capital expenditure/boe to Brent price



Source: U.S. Energy Information Administration, Evaluate Energy

# Profits for global energy companies in second-quarter 2016 declined from the first-quarter level, while U.S. manufacturing companies' profits were stable

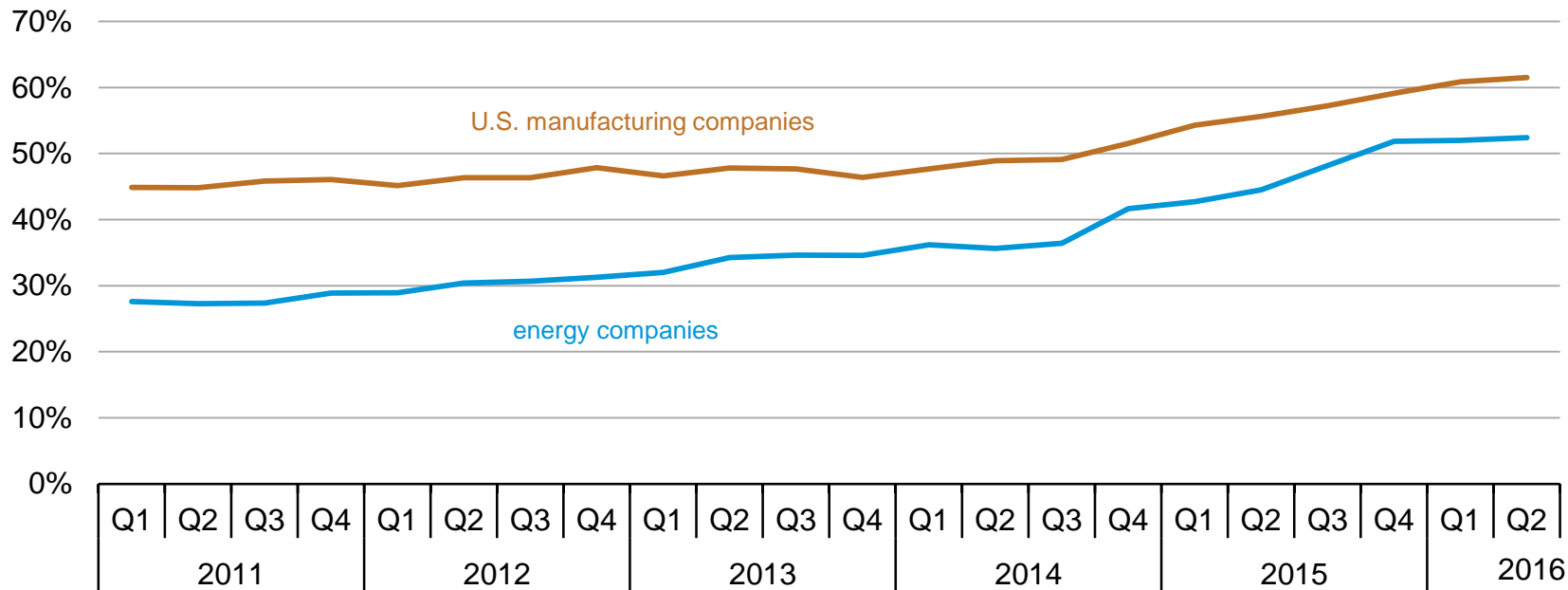
four-quarter return on equity



Source: U.S. Energy Information Administration, Evaluate Energy, U.S. Census Bureau

# Global energy companies' long-term debt-to-equity ratio remained at 52% for the third consecutive quarter

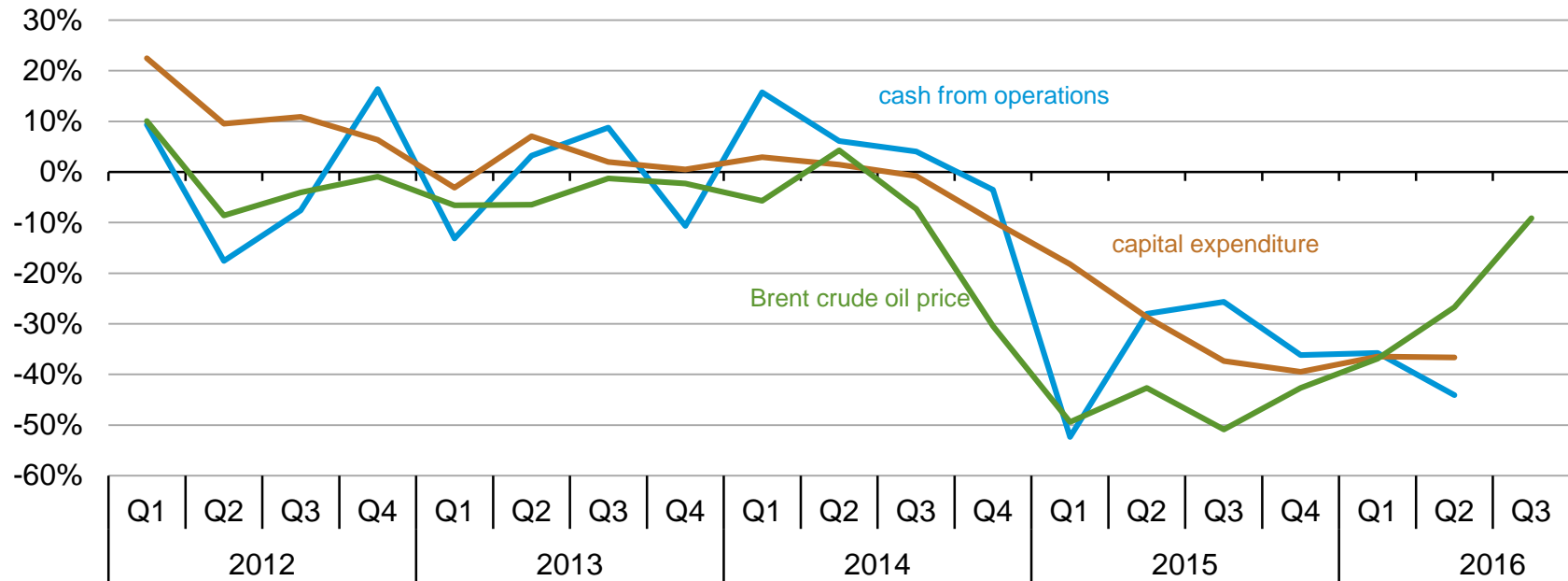
long-term debt-to-equity



Source: U.S. Energy Information Administration, Evaluate Energy, U.S. Census Bureau

# Cash flow and capital expenditure may display smaller year-over-year changes given smaller changes in crude oil prices

cash flow items and Brent prices  
year-over-year change



Source: U.S. Energy Information Administration, Evaluate Energy, Bloomberg

# Appendix: List of companies

Abraxas Petroleum Corporation	Enovus Energy Inc.	EP Energy Corporation	Lundin Petroleum	Petrominerales Ltd.	T-Rex Oil, Inc.
Adams Resources & Energy Inc.	Chesapeake Energy Corp.	EPL Oil & Gas Inc	Magnum Hunter Resources	PetroQuest Energy, Inc	Thunderbird Resources Equity I
Anadarko Petroleum Corp.	Chevron Corporation	ExxonMobil	Marathon Oil Corp.	Pioneer Natural Resources Company	TNK-BP International Ltd
Antero Resources Corporation	Cimarex Energy Co.	Forest Oil Corporation	Matador Resources Company	QEP Resources Inc	Total
Apache Corporation	Clayton Williams Energy	Gazprom Neft	Memorial Production Partners LP	Range Resources Corp	TransAtlantic Petroleum Ltd.
Approach Resources Inc	Comstock Resources	Goodrich Petroleum Corp	Mid-Con Energy Partners, LP	Repsol	TransGlobe Energy Corporation
Arete Industries, Inc.	Concho Resources Inc	Gran Tierra Energy Inc.	Murphy Oil Corporation	Repsol Oil & Gas Canada Inc.	Triangle Petroleum Corporation
Athlon Energy Inc.	ConocoPhillips	Gulfport Energy Corporation	Newfield Exploration Company	Resolute Energy Corporation	Unit Corp
ATP Oil & Gas Corp.	Contango Oil and Gas Company	Halcon Resources Corporation	Noble Energy	Ring Energy Inc	Vaalco Energy Inc
Bankers Petroleum Ltd	Continental Resources	Harvest Natural Resources Inc.	Northern Oil & Gas, Inc	Rosetta Resources Inc.	Vanguard Natural Resources LLC
Baytex Energy Corp.	Denbury Resources Inc.	Hess Corp	Novatek	Rosneft	Vermilion Energy Inc.
Berry Petroleum Co.	Det Norske	Houston American Energy Corp	Oasis Petroleum Inc.	Royal Dutch Shell	W & T Offshore
BG Group	Devon Energy Corporation	Husky Energy Inc.	Occidental Petroleum Corporation	RSP Permian Inc	Whiting Petroleum Corporation
Bill Barrett Corporation	Diamondback Energy Inc.	Imperial Oil Limited	OMV	Sabine Oil & Gas Corporation	WPX Energy
BP Plc.	Earthstone Energy Inc.	Isramco, Inc	Pacific Exploration and Production	Sanchez Energy Corp	YPF Sociedad Anonima
BPZ Resources Inc	Ecopetrol	Ithaca Energy Inc.	Parsley Energy Inc.	SandRidge Energy	Yuma Energy, Inc.
Breitbart Energy Partners	Encana Corporation	Jones Energy, Inc.	PDC Energy, Inc.	SM Energy Company	
Brigham Exploration Company	Endeavour International Corp	Kodiak Oil & Gas Corp.	PEDEVCO Corp.	Sonde Resources Corp.	
California Resources Corporation	Energen Corp	Kosmos Energy	Penn Virginia	Statoil ASA	
Callon Petroleum	Energy XXI	Laredo Petroleum	Penn West Petroleum Ltd.	Stone Energy	
Canacol Energy Ltd.	Enerplus Corporation	Lilis Energy Inc.	Petrobras (IFRS US\$ Current)	Suncor Energy Inc.	
Canadian Natural Resources Limited	ENI	Linn Energy	PetroChina	Swift Energy Co	
Carrizo Oil & Gas, Inc	EOG Resources	Lukoil (IFRS)	PetroMagdalena Energy Corp.	Synergy Resources Corporation	

Source: U.S. Energy Information Administration, Evaluate Energy

Note: Some companies merged or split before 2016. A total of 112 companies existed in second-quarter 2016.

## Background

- This analysis focuses on the financial and operating trends of 112 global oil and natural gas companies (called the *energy companies*).
- The data come from the 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.
- For consistency, a company's assets that were acquired by another company in the group after first-quarter 2011 were kept in the prior year data.

## Brief description of terms

- Cash from operations is a measure of income.
- Capital expenditure represents cash used for property, plant, and equipment.
- Financing activities measure inflows/outflows in debt or equity markets including dividends, share issuance or repurchases, and debt issuance or repayments.
- Return on equity is a measure of the profit a company earns on money shareholders have invested.
- Market capitalization is the total value of all of a company's publicly traded shares outstanding.



## Brief description of terms

- Net income (earnings) represents profit after taxes and depreciation.
- Asset impairments occur when a company lowers the estimated value of a property to reflect current market value, which may result from loss of production potential or declining oil prices.
- The term upstream refers to crude oil exploration, production, and other operations prior to refining. The term downstream refers to refinery operations, product sales, and marketing at the wholesale and retail level.
- Several charts show comparisons between these upstream companies and the U.S. manufacturing industry, collected from U.S. Census Bureau's *Quarterly Financial Report*.