

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



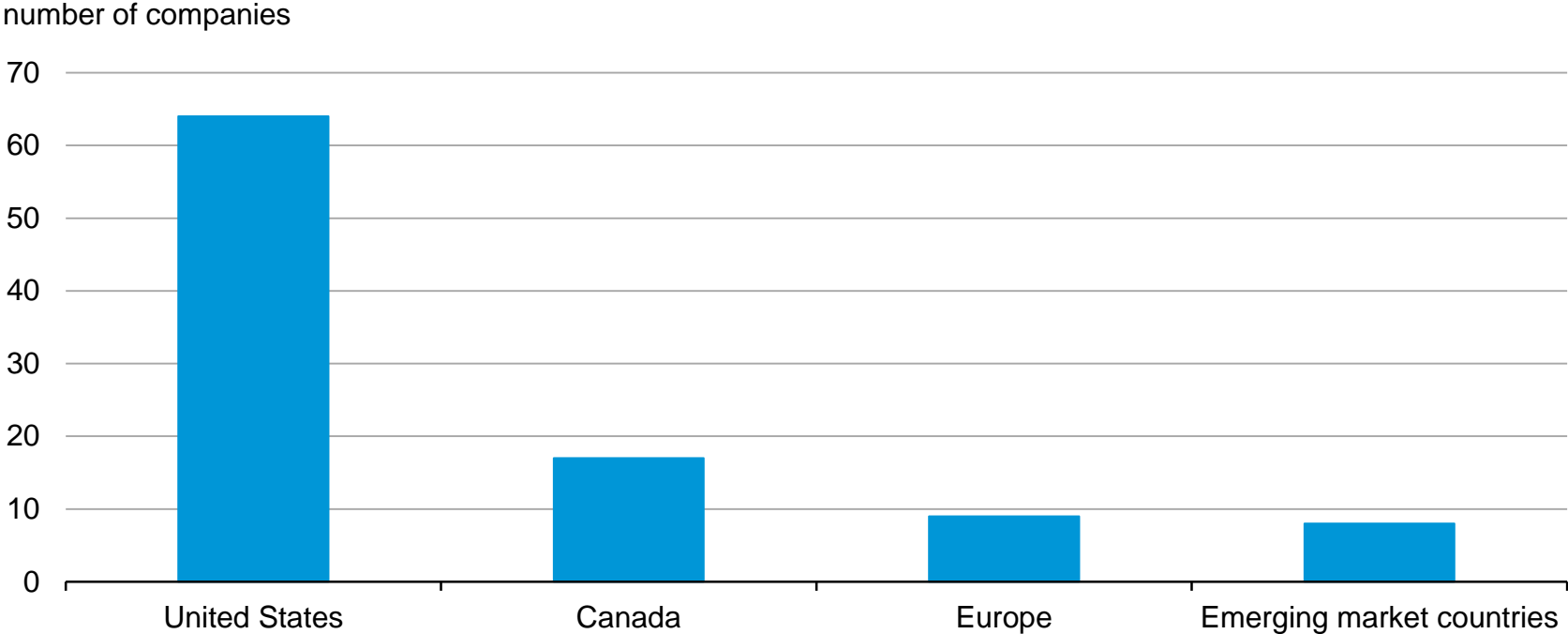
Markets and Financial Analysis Team

July 2016

Key findings for first-quarter 2016

- Brent crude oil prices averaged at the lowest level since 2004, significantly reducing profits and cash flow for energy companies.
- Production increased from year-ago levels, but growth is decelerating as companies reduced capital expenditure.
- Many companies were able to balance their capital expenditure with cash from operations.

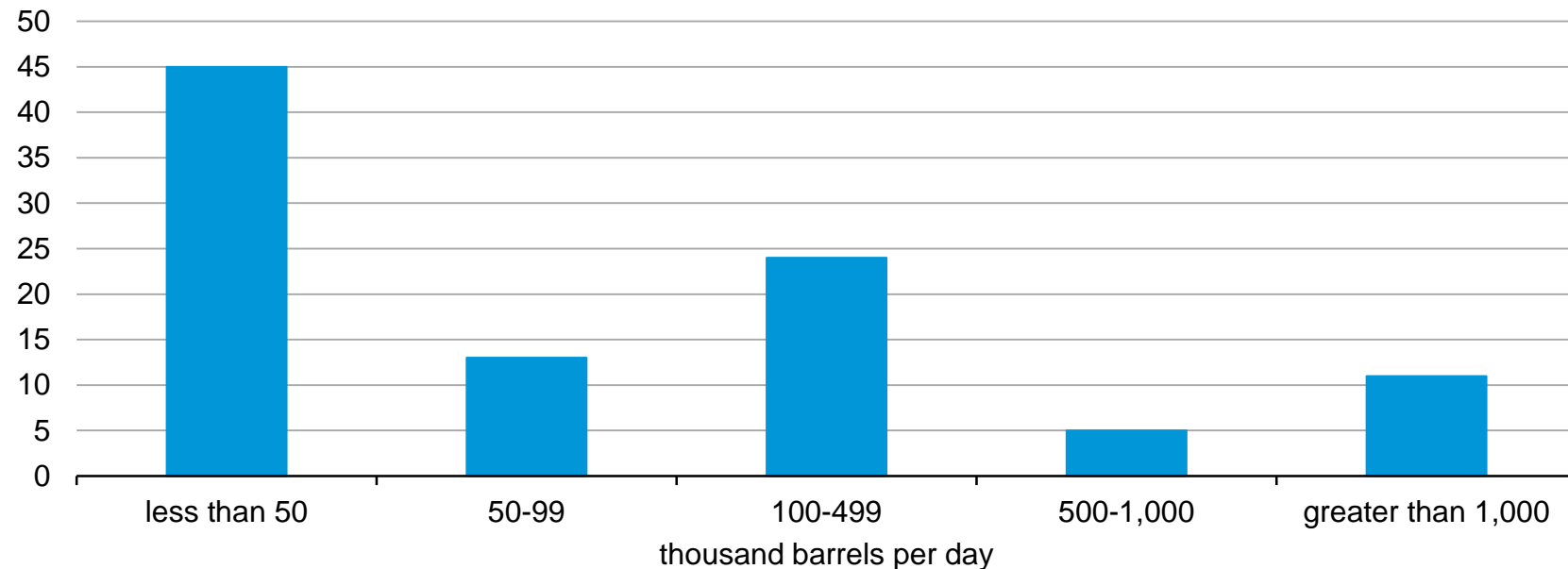
Geographic distribution of global oil and natural gas companies, first-quarter 2016



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

Distribution of companies by production of petroleum liquids, first-quarter 2016

number of companies

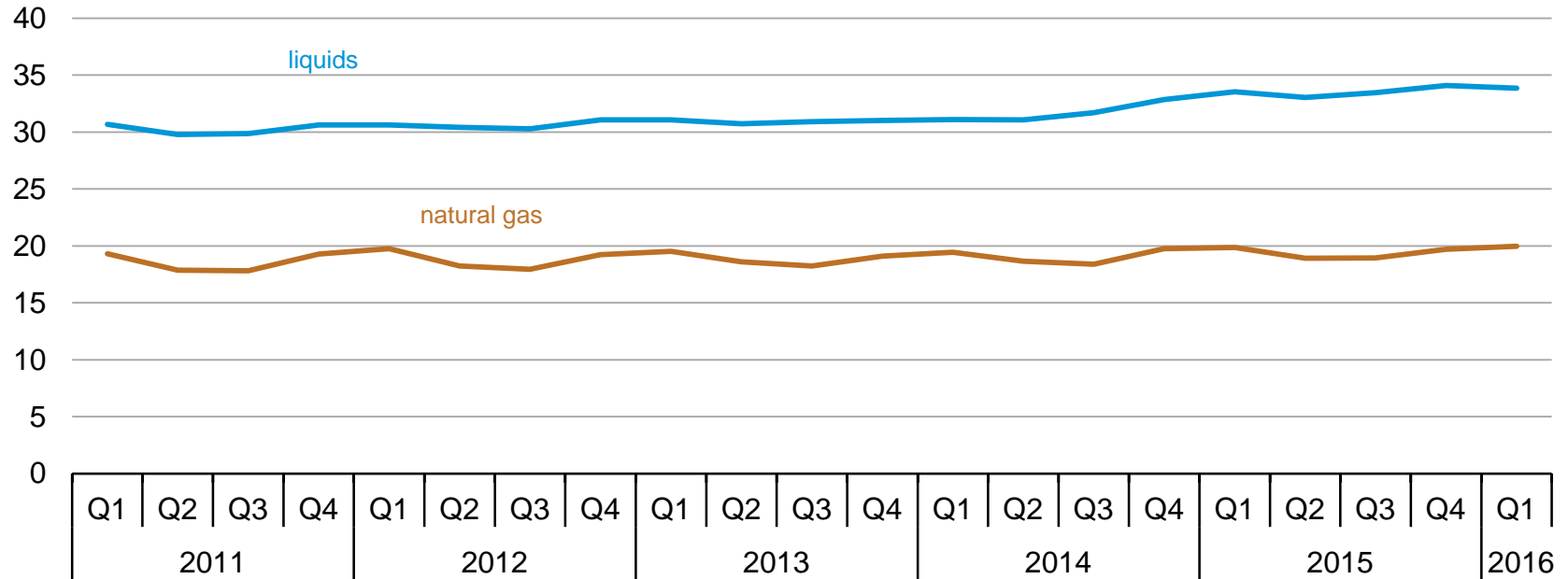


Source: U.S. Energy Information Administration, Evaluate Energy

Production from the oil and natural gas companies

oil and natural gas production

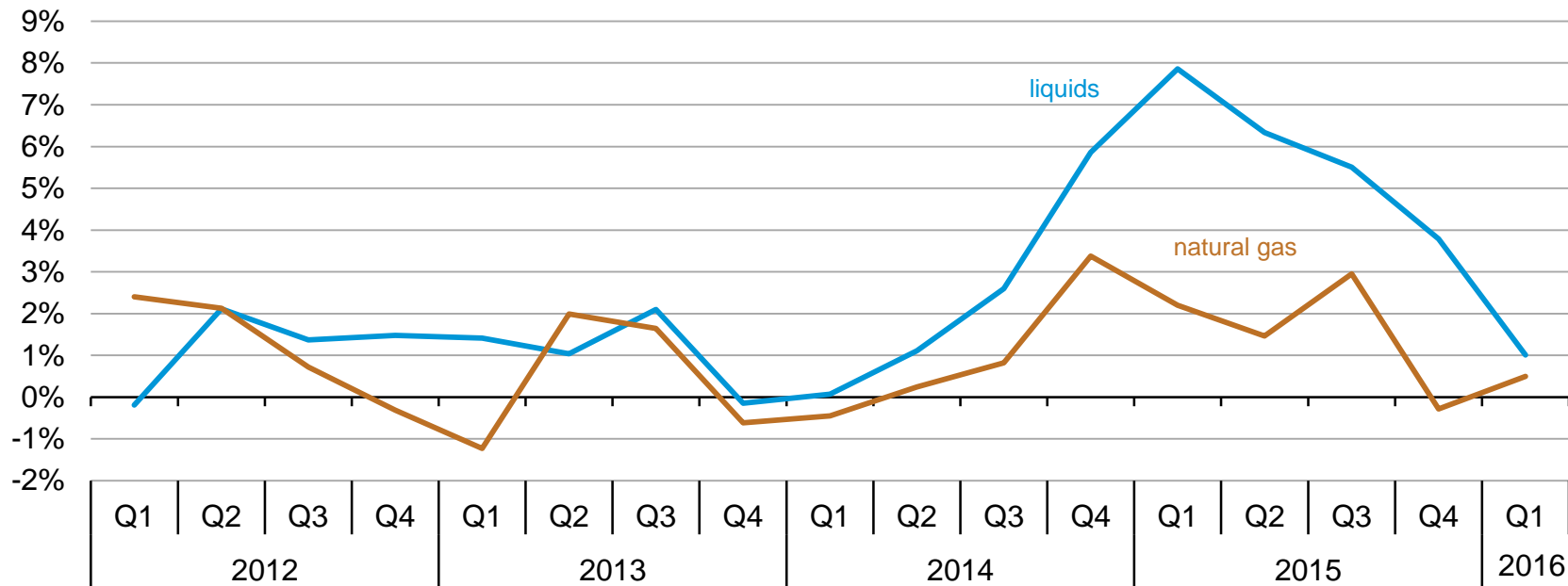
million barrels of oil equivalent per day



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

Liquids production increased 1% and natural gas production increased 0.3% in first-quarter 2016

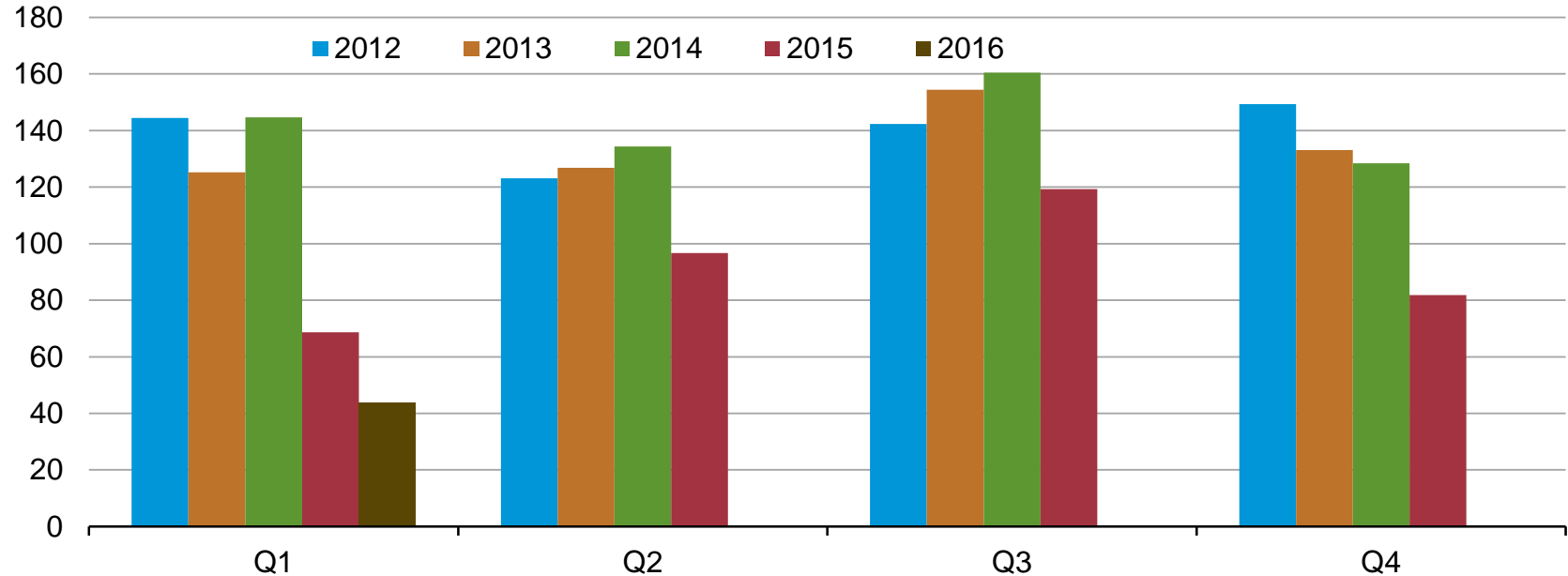
oil and natural gas production
year-over-year change



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

Operating cash flow declined to \$44 billion in first-quarter 2016

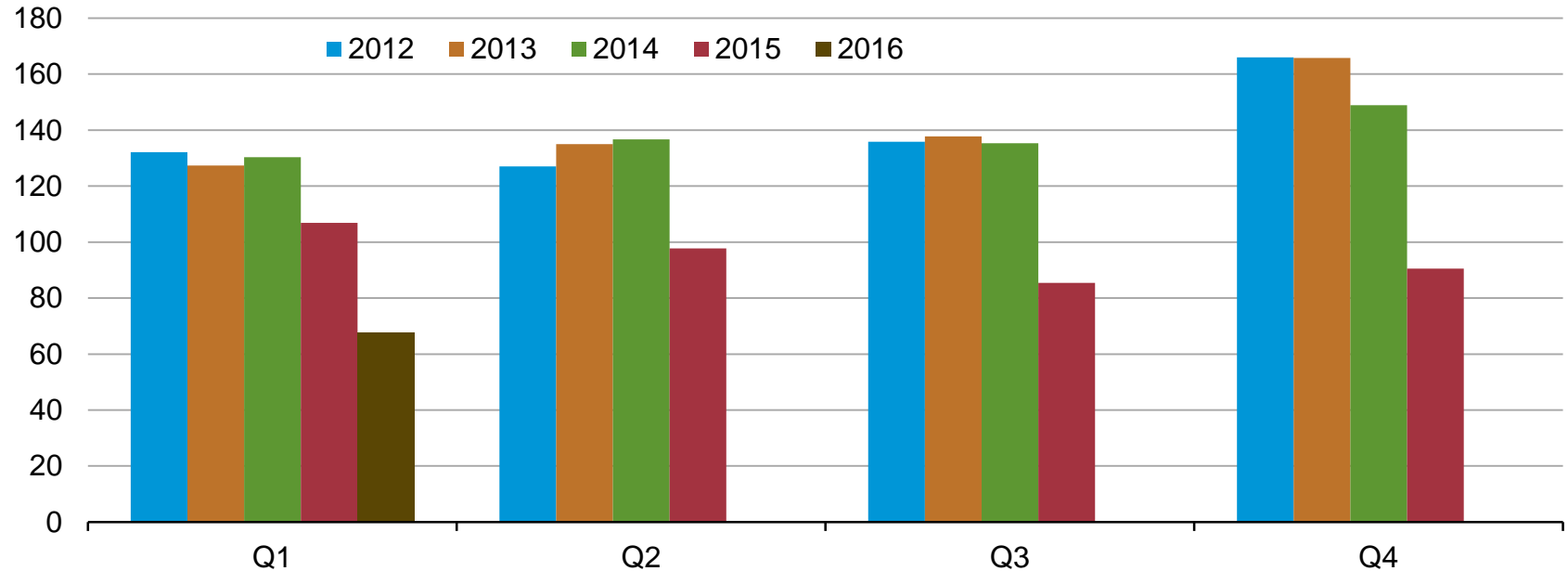
cash from operations
billion 2016\$



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

Capital expenditure in first-quarter 2016 totaled \$68 billion, 36% lower than the first quarter of 2015

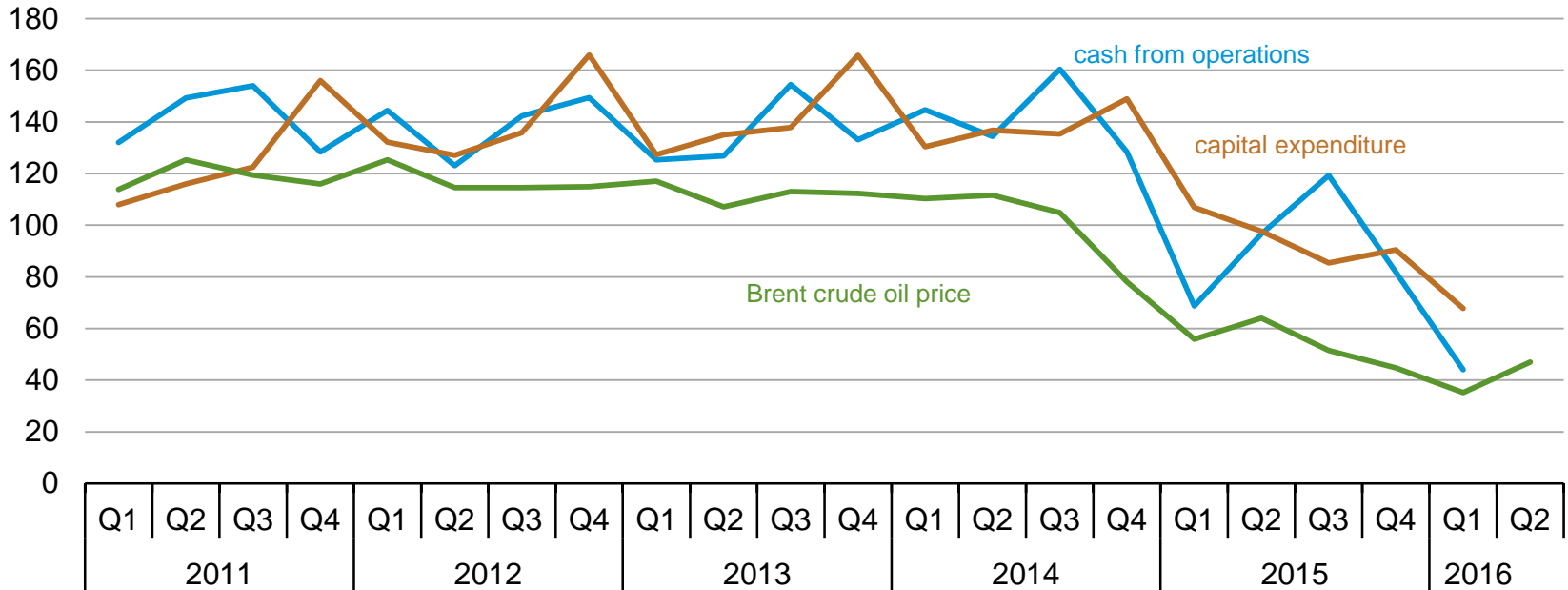
capital expenditure
billion 2016\$



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

Investment and cash flow continued to decline amid falling oil prices

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

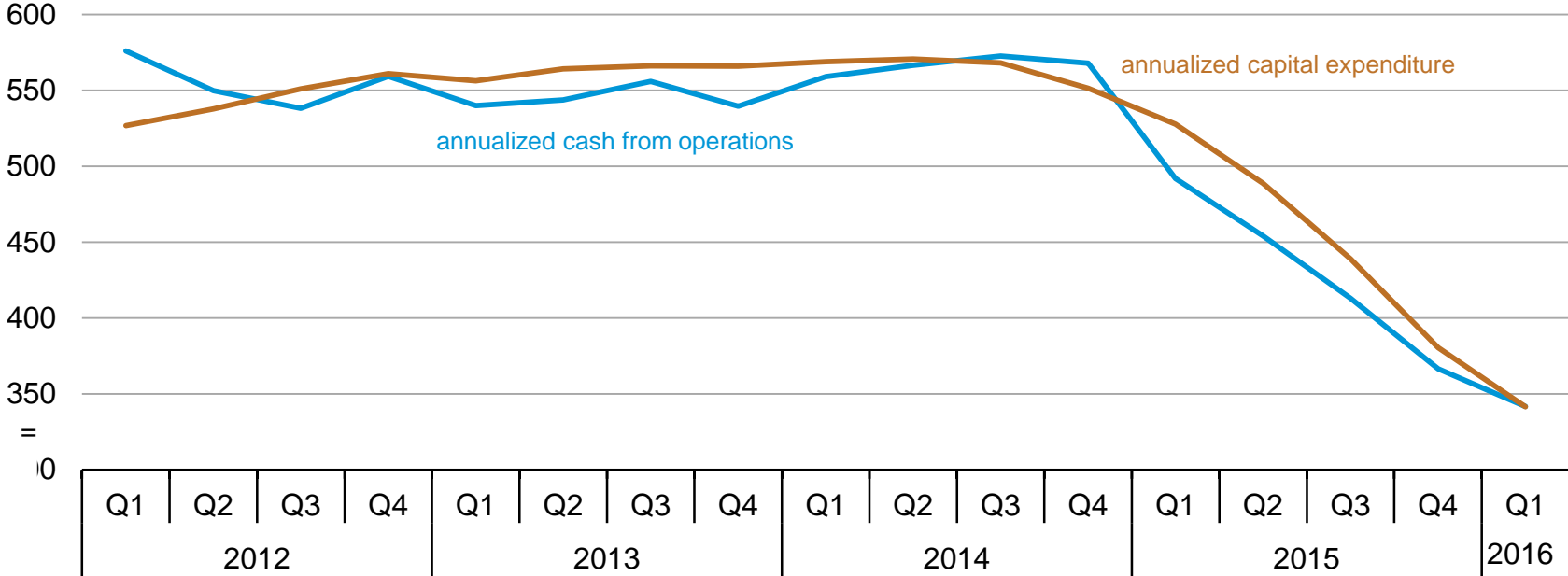


Source: U.S. Energy Information Administration, Evaluate Energy, Bloomberg

Note: b=barrel

Cash flow and capital expenditures in first-quarter 2016 were the same for the first time since 2014

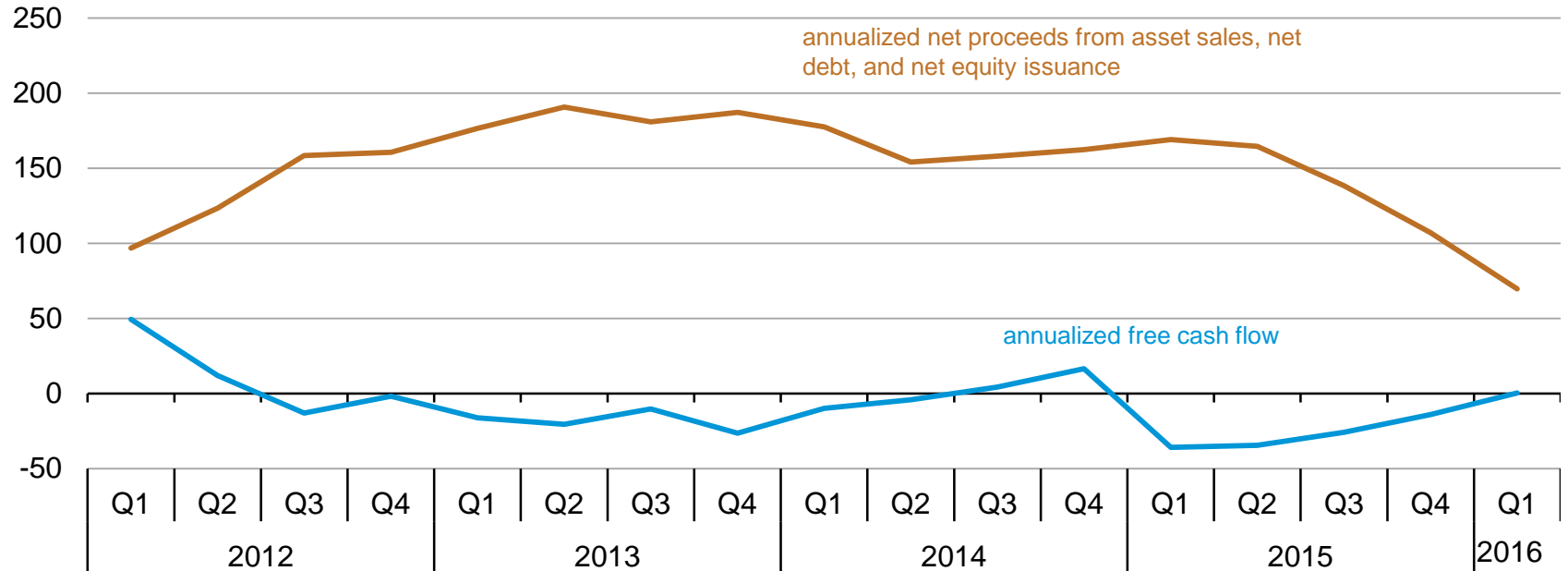
annualized cash flow items
billion 2016\$



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

Higher free cash flow in first-quarter 2016 required the lowest amount of funding from asset sales, equity, or debt since 2012

annualized cash flow items
billion 2016\$

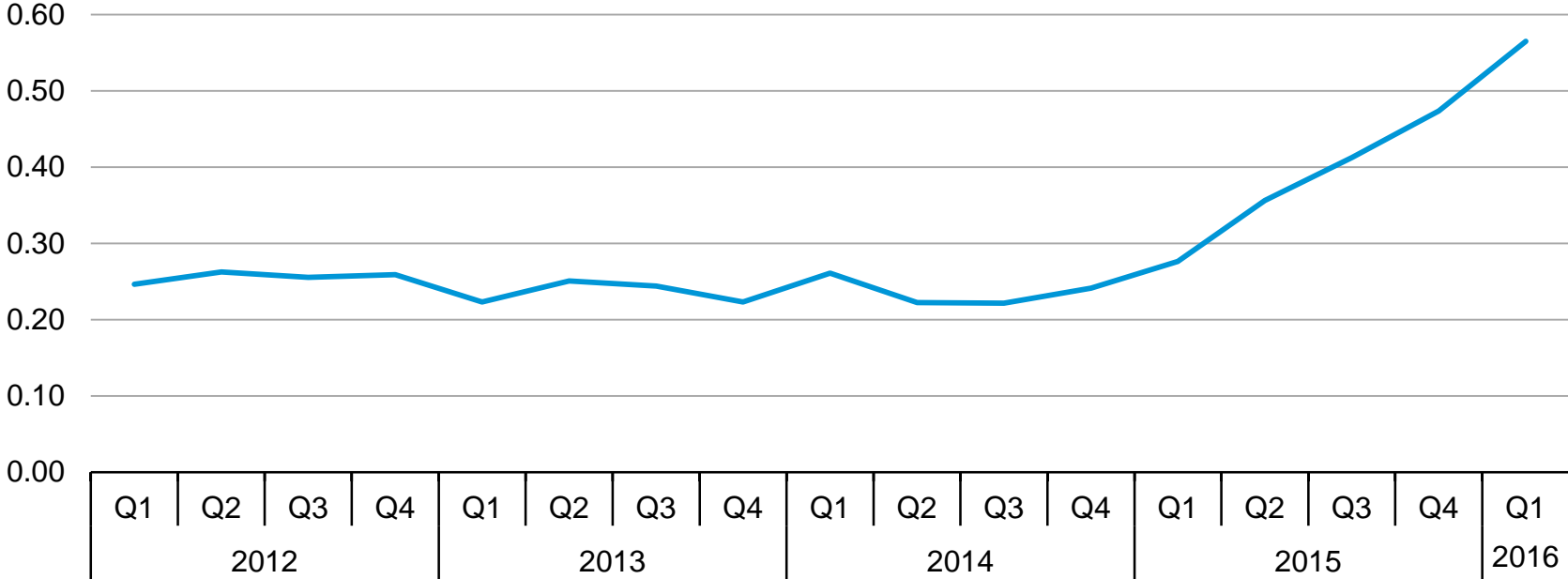


Source: U.S. Energy Information Administration, Evaluate Energy

Note: free cash flow=cash from operations minus capital expenditure

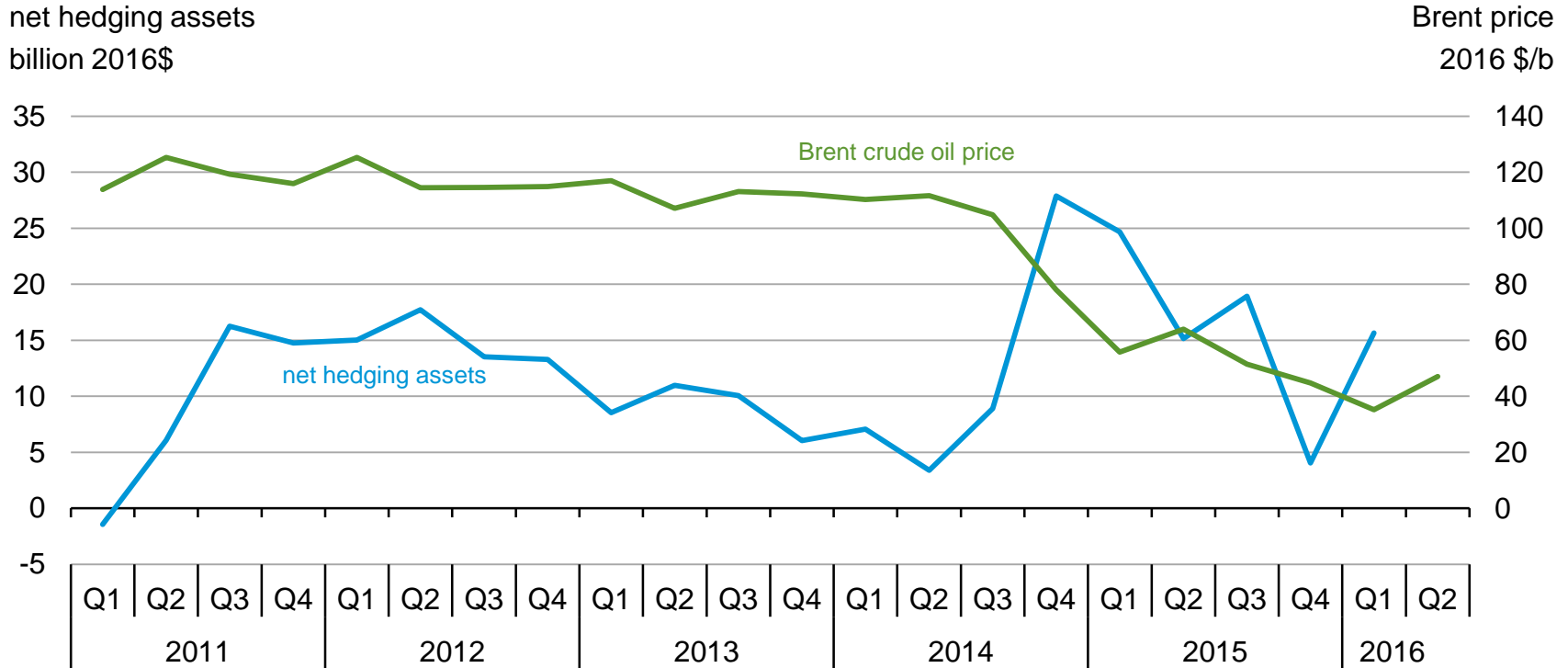
Debt servicing payments as a share of operating cash flow increased as cash flow declined and companies refinanced

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, increased \$11.6 billion since fourth-quarter 2015



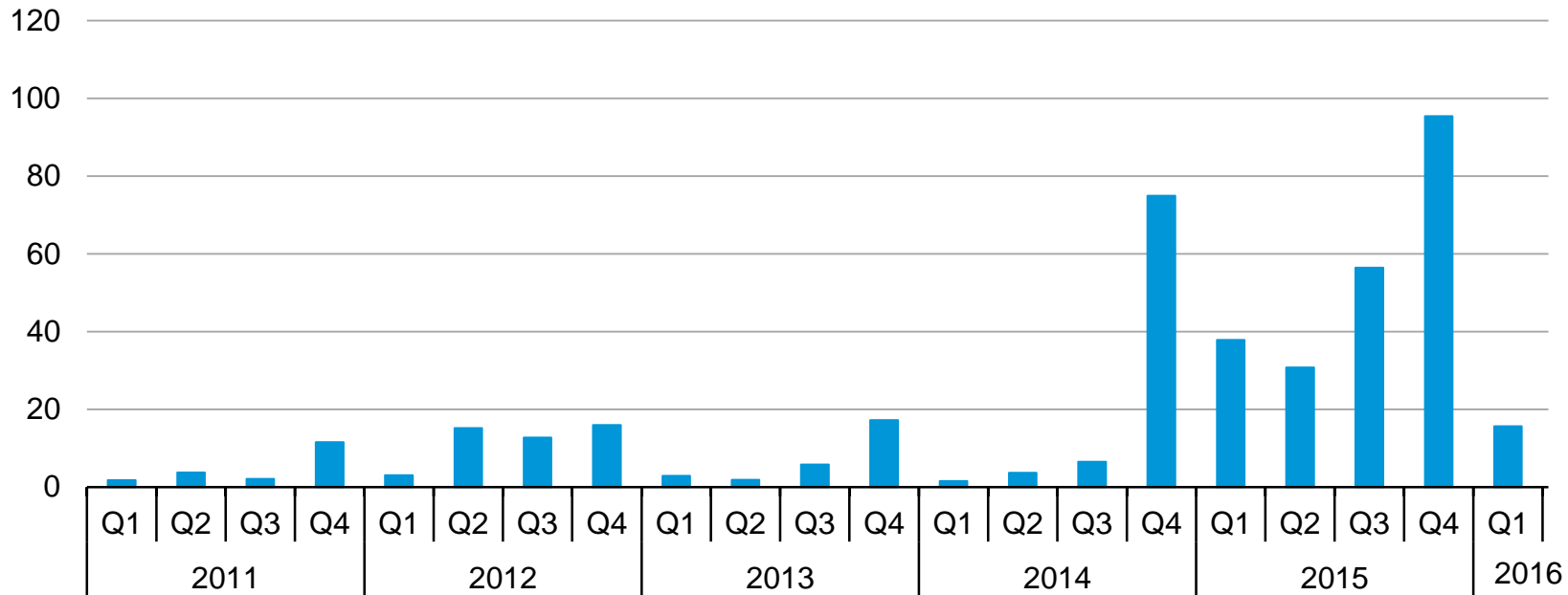
Source: U.S. Energy Information Administration, Evaluate Energy, Bloomberg

Note: b=barrel

Asset write-downs fell to \$15.6 billion in first-quarter 2016, \$22 billion below first-quarter 2015

asset write-downs (impairment charges)

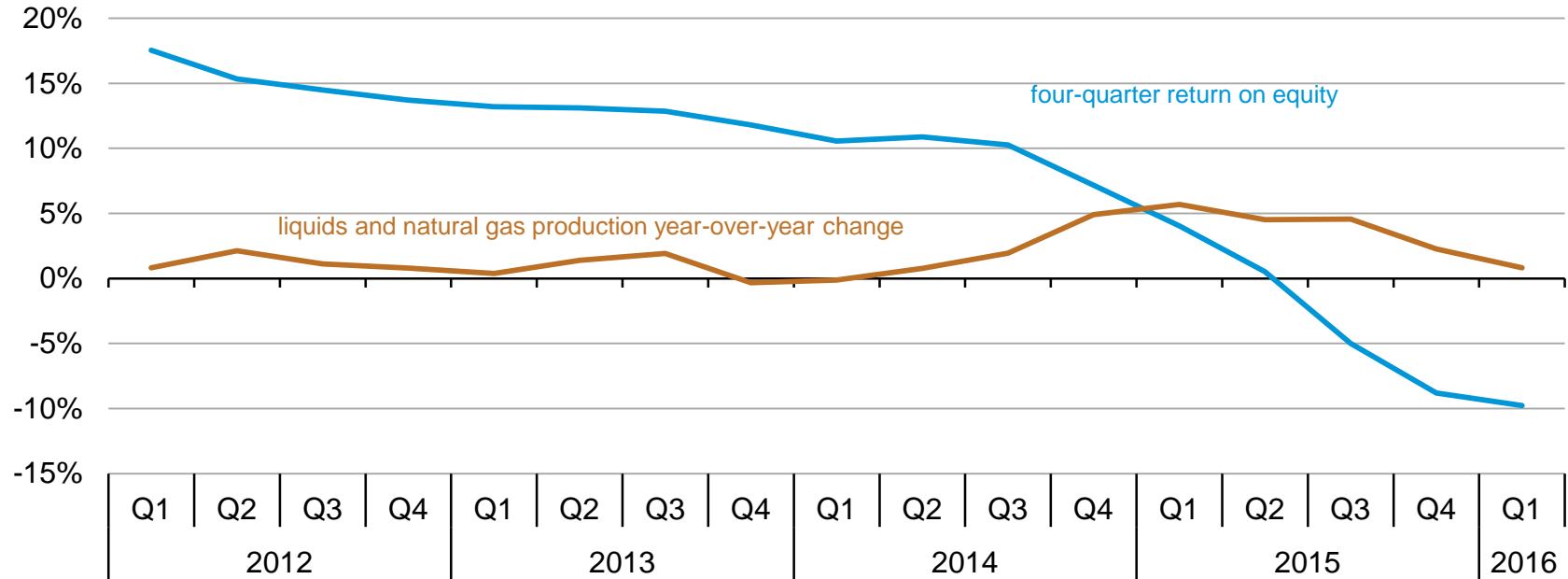
billion 2016\$



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

Falling profits may result in production declines

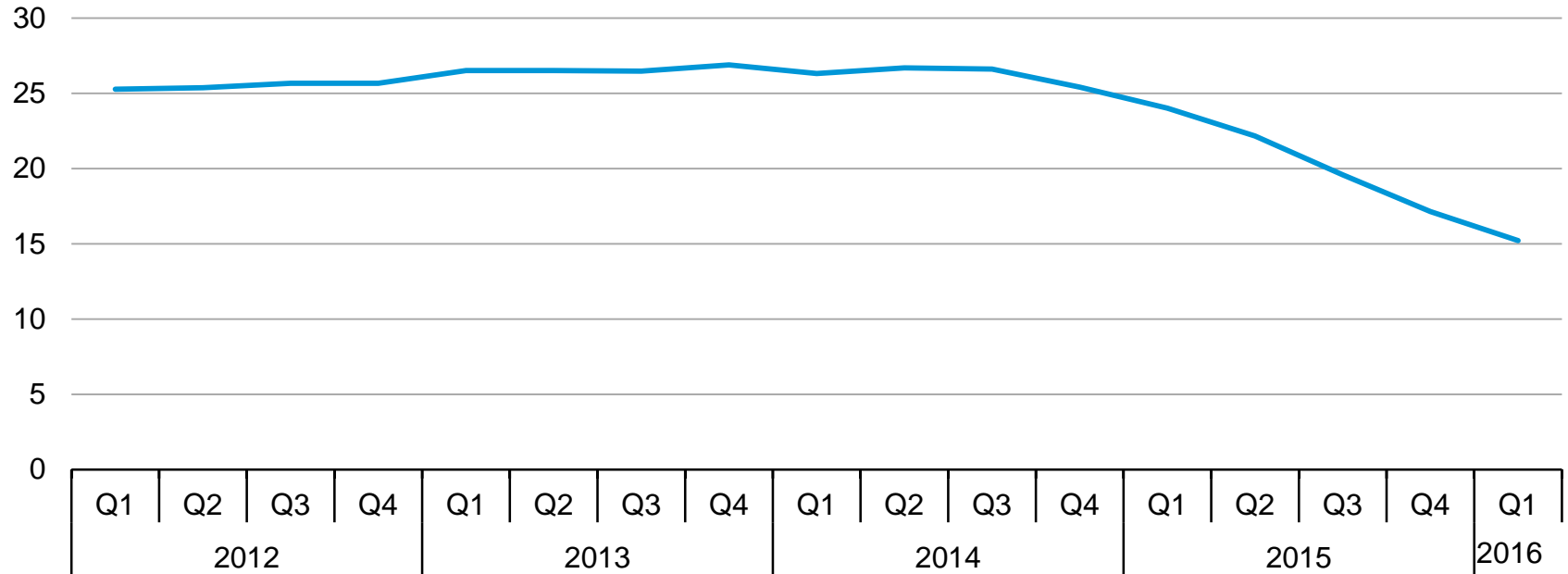
profitability and production



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

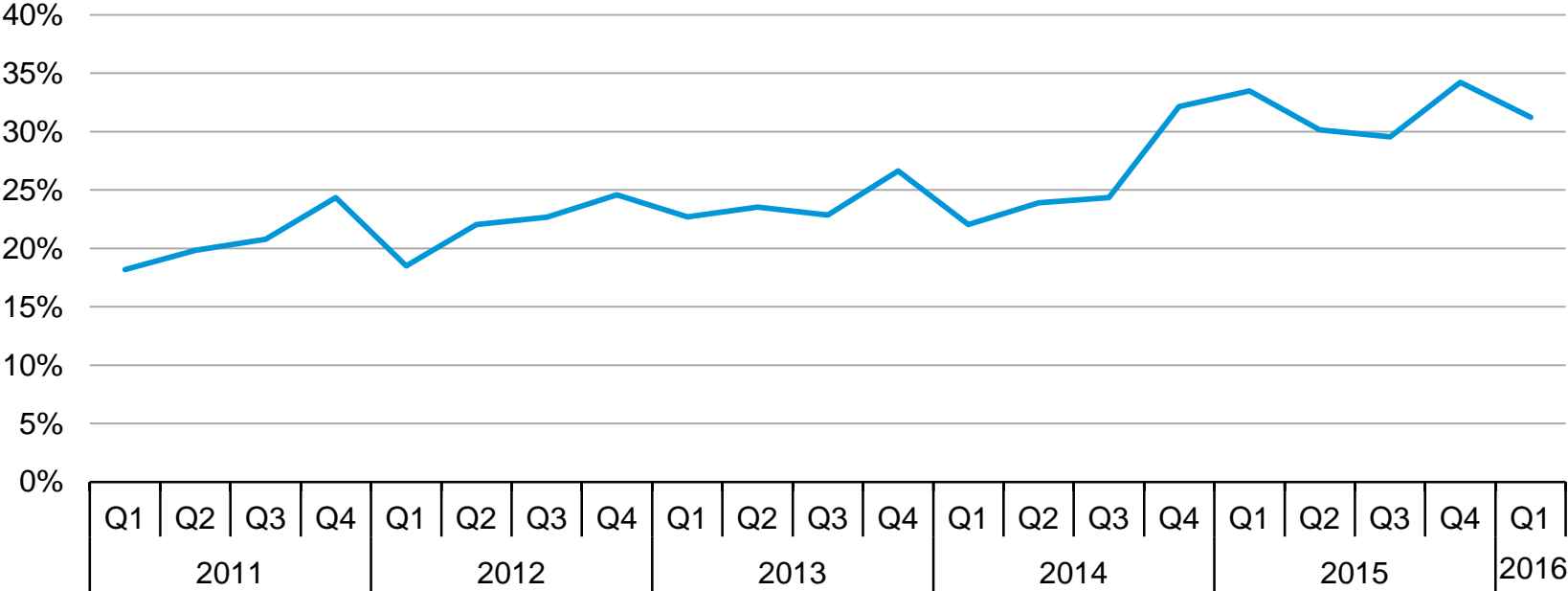


Source: U.S. Energy Information Administration, Evaluate Energy

Note: boe=barrel of oil equivalent

A return to the 25% ratio of upstream capital expenditure to Brent prices would require further spending cuts or an increase in prices

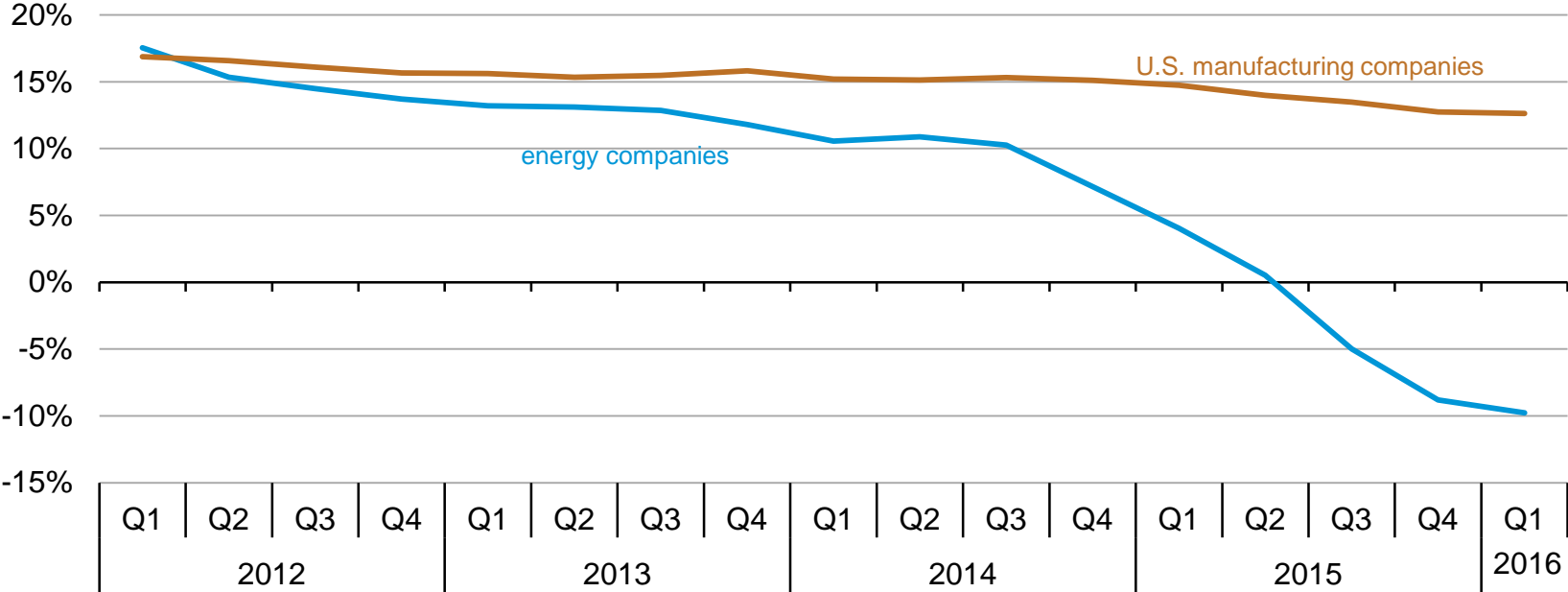
ratio of upstream capital expenditure/boe to Brent price



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

Profits for energy companies and U.S. manufacturing companies continued to decline

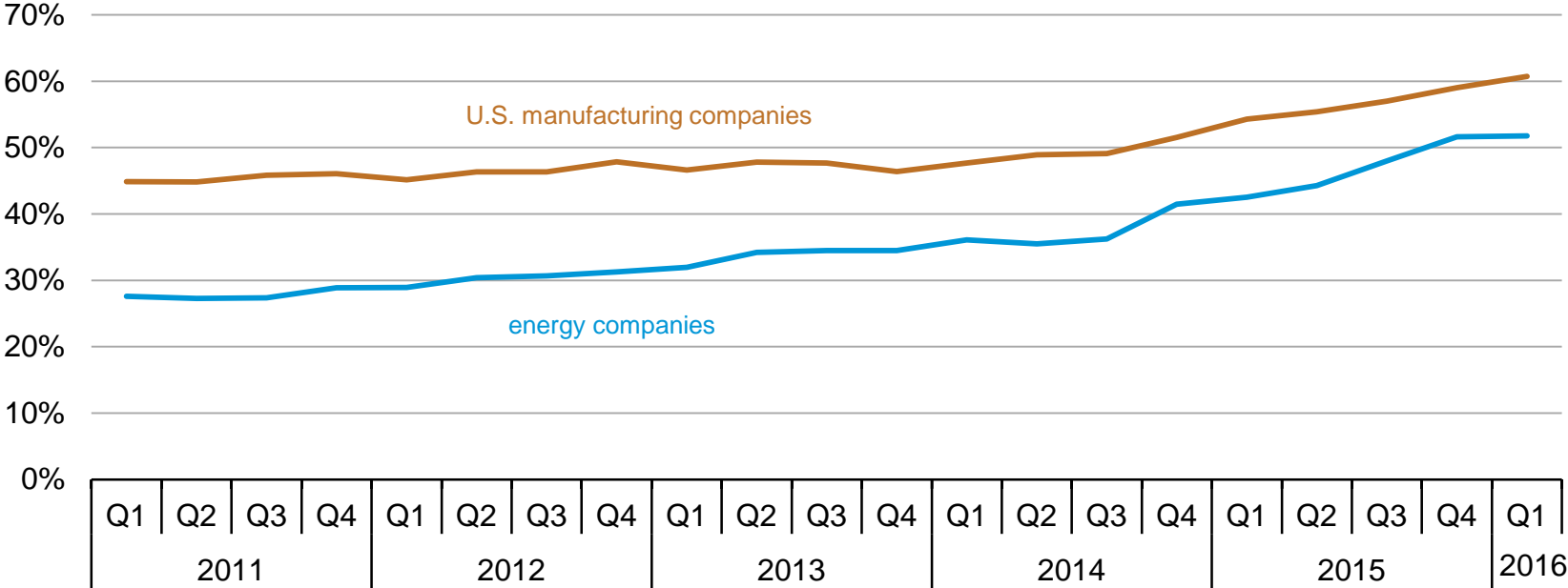
four-quarter return on equity



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

Leverage increased for U.S. manufacturing companies, but it was flat for energy companies since fourth-quarter 2015

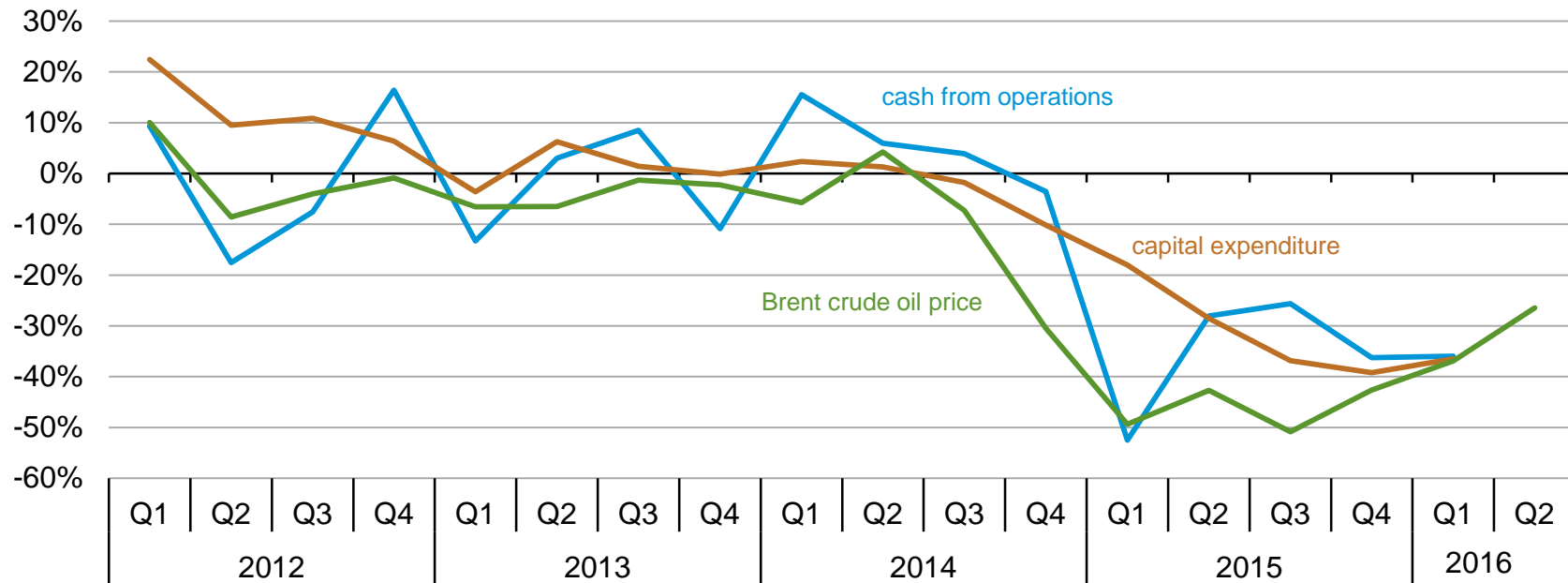
long-term debt-to-equity



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

Cash flow and capital expenditure may continue to decline if oil prices decline

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



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

Appendix: List of companies

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

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

Note: Some companies merged or split before 2016. A total of 98 companies existed in first-quarter 2016.

Background

- This analysis focuses on the financial and operating trends of 98 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*.