SECTOR OVERVIEW

The Energy sector encompasses all of the companies involved in the processes of producing and supplying energy (mainly coal, oil and natural gas). This includes processes that range from exploration and extraction to transportation and distribution. The energy sector has four main subsectors as follows: Integrated Oil & Gas, Exploration and Production, Equipment and Services, and Pipelines

(Image taken from landmarkenvironmental.com)

20 BIGGEST COMPANIES (By Market Capitalization) IN ENERGY SECTOR
(Bloomberg Industry Market Leaders)

1. ExxonMobil (NYSE:  XOM)
2. PetroChina (NYSE: PTR)
3. Royal Dutch Shell (NYSE: RDS-A)
4. Chevron (NYSE: CVX)
5. Total SA (NYSE: TOT)
6. BP Plc (NYSE: BP)
7. Sinopec (NYSE: SHI)
8. BHP Billiton (NYSE:BHP)
9. Eni SPA (NYSE: E)
10. Occidental Petroleum Corp ( NYSE:OXY)
11. CNOOC (NYSE: CEO)
12. ConocoPhillips (NYSE: COP)
13. Statoil ASA ( NYSE: STO)
14. Gazaprom OAO (MCX:GAZP)
15. Rosneft OAO (MCX: ROSN)
16. Suncor Energy Inc ( NYSE: SU)
17. EOG Resources Inc ( NYSE: EOG)
18. Lukoil OAO ( MCX: LKOH)
19. Canadian Natural Resources Ltd (NYSE: CNQ)
20. Novatek OAO (MCX: NVTK)

Subsectors within Energy

The four main subsectors in the energy sector are Integrated Oil & Gas, Exploration and Production, Equipment and Services, and Pipelines.

**INTEGRATED OIL & GAS**

Integrated Oil & Gas companies are involved in many different areas of the production and distribution process. They explore, extract, transport, refine and then sell to various users. Examples of integrated oil & gas companies are Exxon Mobil, Chevron, and British Petroleum.

**EXPLORATION AND PRODUCTION**

Exploration & Production companies are involved solely in this process, and are responsible for finding and extracting the world's resources of oil & gas natural reserves.  Examples of these firms include Continental Resources, Ultra Petroleum, and Apache.

**EQUIPMENT AND SERVICES**

This subsector is involved in a specialized 'nice' of the energy sector. They are involved in offshore drilling, onshore drilling, manufacturing equipment and repairs and other auxiliary services such as consulting, transportation and geological analysis. Examples include Drill-Quip and Halliburton.

**PIPELINES**

This subsector acts as the transportation of the energy sector, and are made up of networks/ 'pipelines' of transportation to refineries within the sector. Examples include Magellan Midstream Partners.

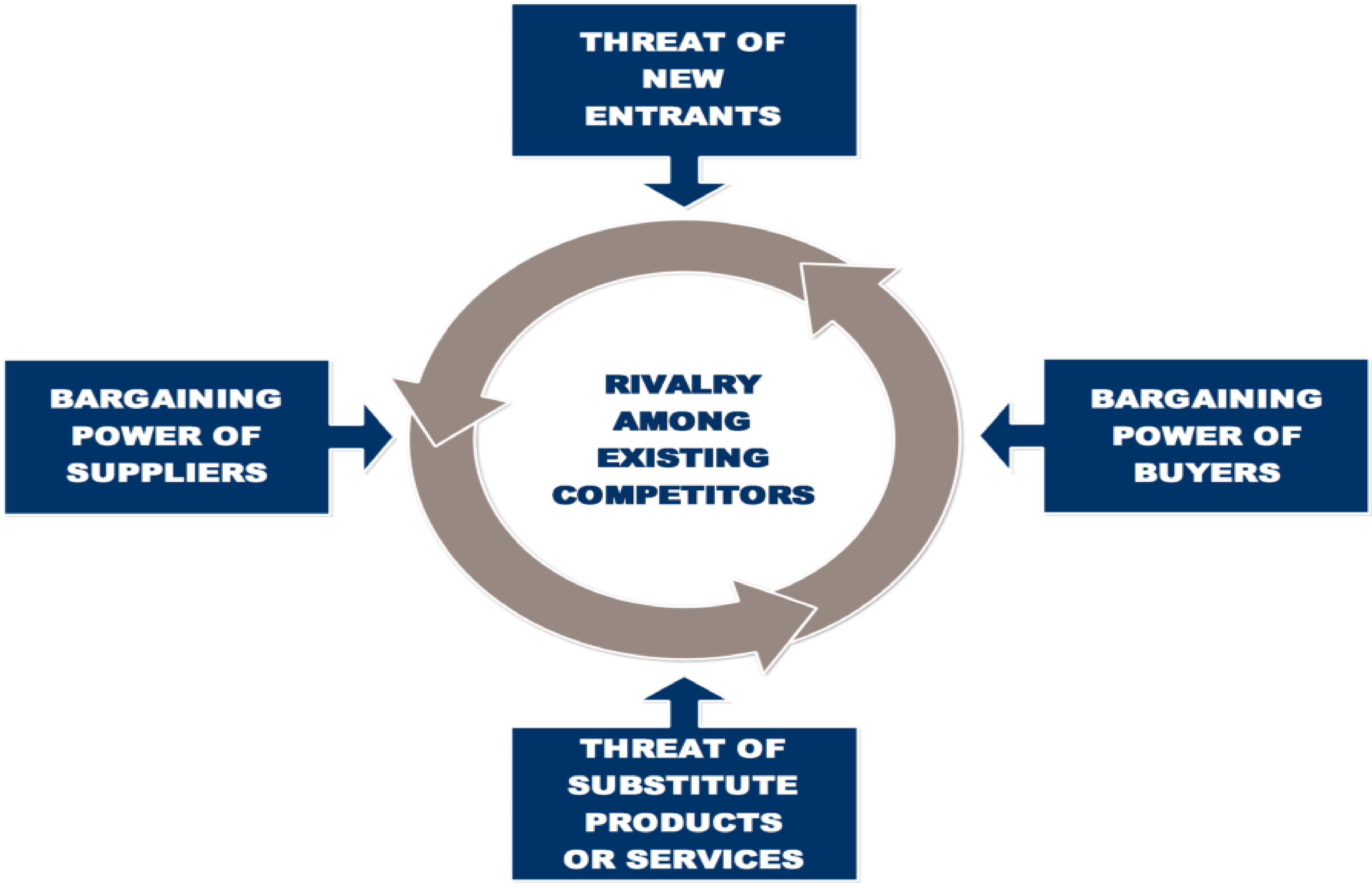
**REFINING & MARKETING**

The Oil & Gas Refining & Marketing subsector consists of companies engaged in the operation of oil and gas refineries for the production of heating, lubricating and fuel oils, as well as gasoline, diesel, jet fuel, propane, kerosene and other liquefied petroleum gas (LPG) products. The industry also includes marketing operations, such as bulk gasoline and crude oil terminals, and truck and automobile service stations with or without convenience stores.

<u>COMPANIES COVERED AND RELATIVE SUBSECTORS</u>

1. Phillips 66 (Refining & Marketing)
2. Exxon Mobil (Integrated Oil & Gas)
3. Chevron (Integrated Oil& Gas)
4. Valero Energy Corp (Refining & Marketing)
5. Marathon Petroleum Corporation (Refining & Marketing)
6. Occidental Petroleum Corporation (Exploration & Production)

PORTER'S 5 FORCES ANALYSIS OF ENERGY SECTOR



## Rivalry among Existing Competitors (HIGH)

- Fairly large number of competitors in the Energy Sector
- Oversupply of Oil gives more power to purchasers and stimulates price war competition

## Threat of New Entrants (LOW)

- The Energy Sector has extremely high investment costs for most subsectors because of required infrastructure.
- Ownership of Resources limits possible market share in exploration and production
- Government Regulations often restrict/ favor certain suppliers
- Economies of scale take several years to be realized because of already saturated market
- Low potential new entrants

## Threat of Substitutes (MEDIUM/LOW)

- Alternative energy sources include SOLAR, WIND, NUCLEAR, however are not as efficient and would include costly switching costs.
- Threat of electric/ hybrid vehicles on the rise as manufacturers increase energy alternative cars.

## Bargaining Power of Buyers (MEDIUM)

- Market Demand is the PRIMARY FACTOR in setting prices, and market demand is at all time LOW, relative to supply.
- No individual bargaining power as consumers are represented by refineries and distributors so costs may still be transferred.

## Bargaining Power of Suppliers (HIGH)

- Many firms are vertically integrated so bargaining power of suppliers is not a factor.
- Because of large number of producers and low demand, in Exploration and production bargaining power of supplier is higher than previous years.

BIGGEST TRENDS AFFECTING EXPLORATION AND PRODUCTION SECTOR

- There has been increasing trends toward **Technology Revolution in Oil & Gas**.
    - Digital Oilfields: Integrates technology into exploration to get more precise estimates. Estimates of 25% increase in NPV of oil & Gas assets if implemented.
    - 4D Seismic Technology: Predicting seismic patterns for deeper oil exploration of shale oil and shale gas formations.
- Shale Oil Production
    - Exploitation of shale basins using methods such as hydraulic fracturing ("fracking") and horizontal has caused U.S. crude output to skyrocket to its highest level since 1989.
    - New Shale oil production methods partly responsible for oversupply of oil
- Plummeting oil prices: Oil prices have decreased more than 60% since their last peak in spring 2014.

*As oil prices tumble…*

**Daily Brent crude oil price at close of business**


Source: Bloomberg; Strategy& research

(Bloomberg Strategy & Research)

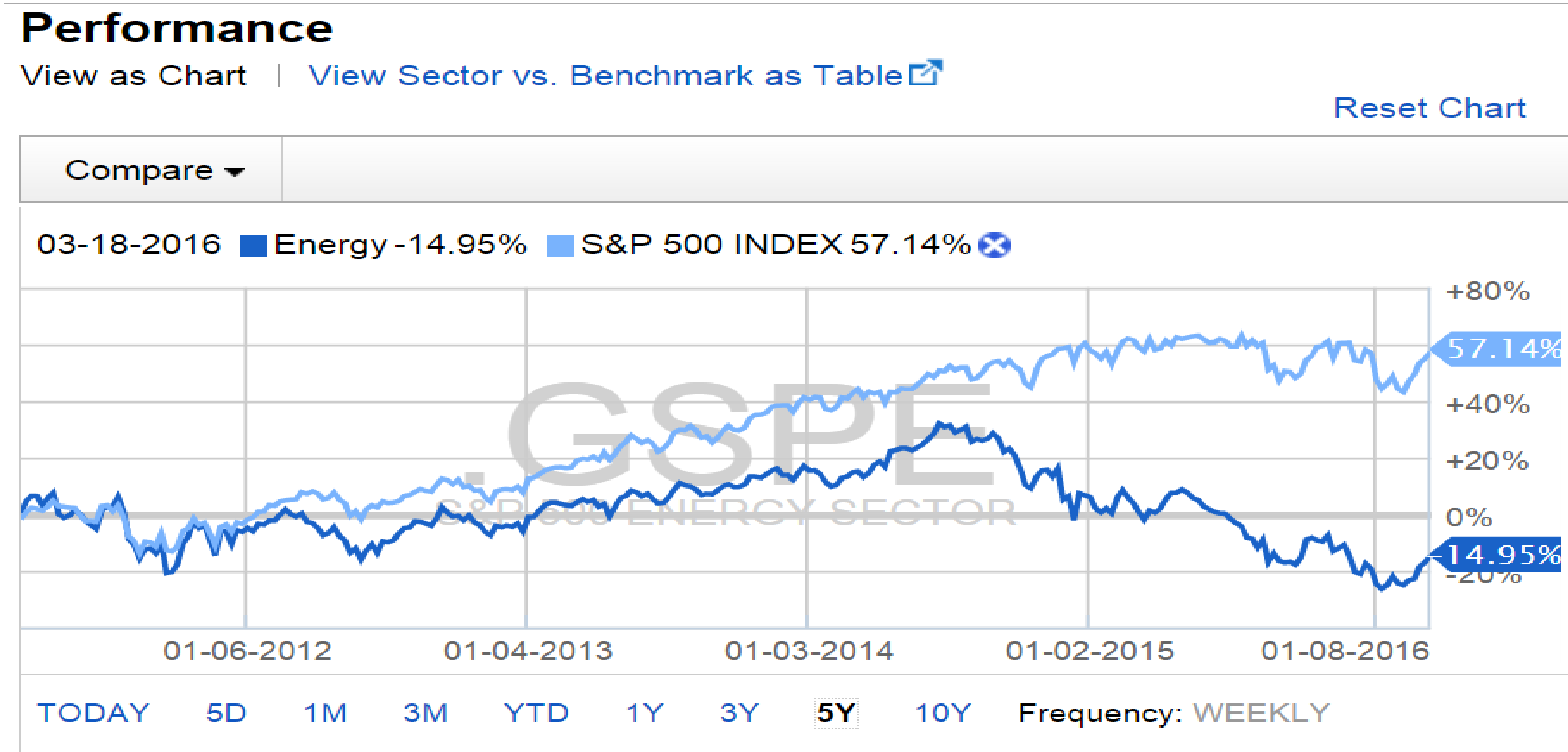
- Oversupply of Oil and instability of OPEC to agree on strategy to control production
    - EU embargo on Iranian oil, as well as US sanctions lifted in January 2016 which added more oil to glut.

NEWS/STORYLINES IN OIL& GAS INDUSTRY

- Record low oil prices forces closing down of many oil refineries
- China's slowed growth affecting oil demand
  - Still developing economy China has had growth slow down, and as a result, industrial production, and their DEMAND FOR OIL has DECREASED.
  - Positive correlation between China's economic development and oil demand.
- MEGERS & ACQUISITIONS
  - Royal Dutch Shell in the process of purchasing British Gas for $70B which will make shell the LARGEST Liquefied Natural trader.

EARNINGS TRENDS WITHIN SECTOR FOR PAST 5 YEARS

Using the S&P 500 Energy Index as a model for the earnings performance of the energy sector, one can see the gradual decrease in earnings in the last 3 years. The sector's performance has decreased due to oil prices and shows a -14.95% decrease to date, compared to the S&P 500 average. Generally speaking, earnings have (for the past year and a half) and continue to be negative for companies directly impacted by low oil prices.




(Taken from Fidelity investments market research)

STOCK PRICING TRENDS WITHIN SECTOR FOR PAST 5 YEARS

## S&P 500 Energy (Sector) (INDEXSP:SP500-10)

Add to portfolio

**473.35** +0.92 (0.19%)

Mar 18 - Close

INDEXSP real-time data - Disclaimer

| | |
|---|---|
| Range | 469.30 - 476.00 |
| 52 week | 376.13 - 610.82 |
| Open | 472.43 |
| Vol. | 0.00 |

G+1 1

Compare: Enter ticker here Add NYSE:XOM NYSE:CVX « less


Settings | Technicals | Link to this view

Sources include SIX.

The chart above shows a comparison of the historical stock prices of the S&P 500 Energy Index vs. Chevron.  The index shows the percentage increases and decreases over the years with the most volatility being in the last three years. The S&P 500 Energy Index reflects the gradual decline in the energy sector which began in mid-2014. One can observe the index's increases, decreasing by 10%, to below 0, and then by the year 2015, showing drastic decreases in the beginning to mid-year. At this time, the price of oil had decreased from about $105 per barrel in early 2014, to $66.20 by the end of 2014, and then an even more drastic drop $47 by the first quarter of 2015. The year 2015 showed a little pickup, with prices dropping and then gaining briefly momentum, but the average is at about just under $40. With current prices at $39.44 (Crude oil). The volatility of oil prices mirrors directly the volatility displayed in the Energy index. The price of oil, for large companies directly involved in the oil & extraction process, has eaten away at the stocks' market value. One should also note, the red line corresponding to Chevron's performance, which has the second highest weight in the S&P 500 Energy Index, and has consistently performed much better than the S&P 500 energy average over the past five years.

## COMPANY OVERVIEW

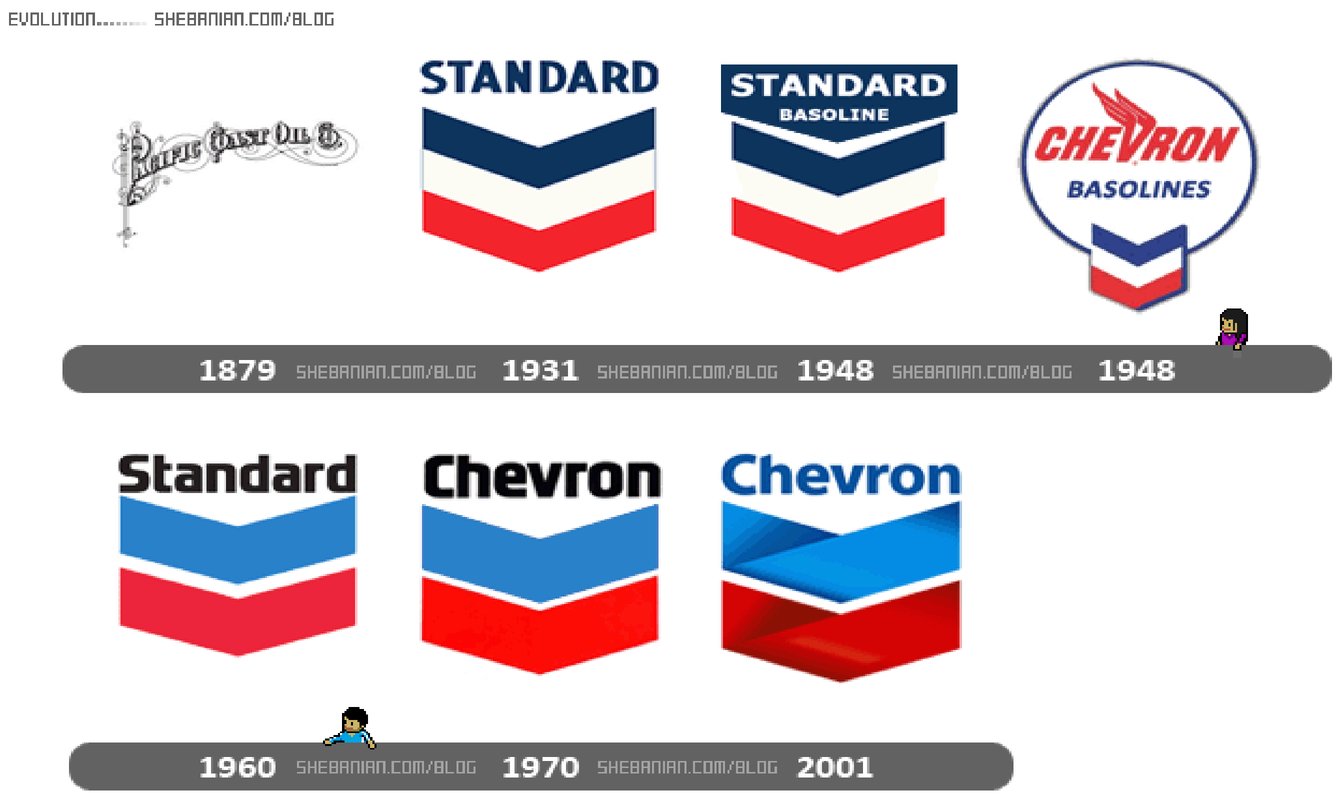
Chevron Corporation is an American Multinational Integrated Oil & Gas Company with headquarters in San Roman, California. It operates in more than 180 different countries including Asia, Australia and South Africa. As an integrated Oil & Gas company, its functions range across all aspects of the production process, and include Drilling and exploration, refining, marketing and distribution, transportation as well as chemicals manufacturing and sales.

Chevron Corp. is one of the world's largest oil & gas companies, ranking 4th on the list according to market share, and the second largest integrated oil & Gas Company in the United States.

Under its belt of services also includes Chevron's shipping company; Chevron Shipping Company LLC, its power generation services, as well as its alternative energy sources. Chevron's alternative energy sources span solar, geothermal, biofuel, hydrogen, as well as wind power.

BRIEF HISTORY

Chevron Corp began in 1879 as Pacific Coast Oil Co., and has merged and joined with several companies over the years to become the Chevron Co. that it is today. In 1911, Standard Oil of California (SoCal) as formed as a result of the breakup of Rockefeller's Standard Oil Company. Then in 1984, SoCal and Gulf Oil merged in what was deemed the largest merger in history at that time. SoCal sold of many of Gulf's refineries and changed the name to **Chevron Corporation**. In 2001, Chevron acquired Texaco to become ChevronTexaco, and in 2005, Chevron changed its name again to **Chevron Corporation**.



EXECUTIVE BOARD

John S. Watson

Chairman and CEO

John S. Watson, 59, is chairman of the board and chief executive officer of Chevron Corporation, a position he has held since 2010. Previously Watson served as vice chairman of the board from 2009 to 2010 and was responsible for business development; mergers and acquisitions; strategic planning; corporate compliance; policy, government and public affairs; procurement; and the Project Resources Company. Watson serves on the board of directors and the executive committee of the American Petroleum Institute. He is a member of the National Petroleum Council, The Business Council, the Business Roundtable, and the J.P. Morgan International Council.

Piere Brieber

Executive Vice President, Downstream Chemicals

Pierre R. Breber, 51, is executive vice president of Downstream and Chemicals, a position he has held since January 2016. He is responsible for directing the company's worldwide manufacturing, marketing, lubricants, chemicals and Oronite additives businesses. He also oversees Chevron's joint-venture Chevron Phillips Chemical Company. Previously Breber was executive vice president of Gas and Midstream where he was responsible for commercializing Chevron's natural gas resources and oversaw the company's shipping, pipeline, power and energy management, and supply and trading operations.

Paul V. Bennett

Vice President and Treasurer

Paul V. Bennett, 62, is vice president and treasurer for Chevron Corporation, a position he has held since 2011. He is responsible for banking, financing, cash management, insurance, pension investments, and credit and receivables activities across the corporation. Previously Bennett served as vice president of Finance, Downstream and Chemicals, from 2009 to 2011 and was responsible for delivering finance support to all areas of Downstream and Chemicals

James W. Johnson

Executive Vice President, Upstream

James W. (Jay) Johnson, 56, is executive vice president, Upstream, a position he has held since 2015. He is responsible for Chevron's global exploration and production activities for crude oil and natural gas. Previously Johnson was senior vice president of Upstream. From 2011 to 2014, Johnson served as president of Chevron Europe, Eurasia and Middle East Exploration and Production Company.

EXECUTIVE BOARD

**Mary A. Francis**

Corporate Secretary and Chief Governance Officer

Mary A. Francis, 51, is corporate secretary and chief governance officer for Chevron Corporation, a position she has held since 2015. She provides advice and counsel to the board of directors and senior management on corporate governance matters, manages the company's corporate governance function and serves on the Law Function Executive Committee. She also serves as secretary to the board, the Executive Committee, and the Board Nominating and Governance Committee.

Joseph C. Geagea

Executive Vice President, Technology, Projects and Services

Joseph C. (Joe) Geagea, 56, is executive vice president of Technology, Projects and Services, a position he has held since 2015. He is responsible for energy technology, delivery of major capital projects, procurement, information technology, health, environment and safety, upstream production services, and talent selection and development in support of Chevron's upstream, downstream and midstream businesses. Previously Geagea was senior vice president of Technology, Projects and Services since 2014.

**Stephen W. Green**

Vice President, Policy, Government and Public Affairs

Stephen W. (Steve) Green, 58, is vice president of Policy, Government and Public Affairs for Chevron Corporation, a position he has held since 2011. He is responsible for U.S. and international government relations, all aspects of communications, and the company's worldwide efforts to protect and enhance its reputation.

**C.N. (Sandy) Macfarlane**

Vice President and General Tax Counsel

C.N. (Sandy) Macfarlane, 61, is vice president and general tax counsel for Chevron Corporation. He has held the position of general tax counsel since 2010 and was appointed vice president in 2013. He is responsible for directing Chevron's worldwide tax activities.

MOST IMPORTANT CHEVRON PRODUCTS/SERVICES

- ✓ Oil
- ✓ Lubricants
- ✓ Additives
- ✓ Base Oils
- ✓ Chemicals

# Major Business Strategies

### Upstream

Grow profitably in core areas and build new legacy positions.

### Gas and Midstream

commercialize our equity gas resource base while growing a high-impact global gas business.

### Downstream and Chemicals

Improve returns and grow earnings across the value chain.

### Technology

Differentiate performance through technology.

### Renewable Energy and Energy Efficiency

Invest in profitable renewable energy and energy efficiency solutions.

PORTER'S 5 FORCES ANALYSIS OF CHEVRON ENERGY CORPORATION

## Rivalry among Existing Competitors (LOW/MEDIUM)

- Biggest local competitor is ExxonMobil
- Relatively saturated market in Oil & Gas, and competition is heightened due to oversupply in last year.
- Little to no barriers to exit preventing weak firms from exiting industry: Many firms leaving due to low oil prices
- US Government regulates competition to ensure monopoly doesn't occur
- Relatively large industry size shields competitive rivalry

## Threat of New Entrants (LOW/MEDIUM)

- Strong distribution network required as well as high start-up/ infrastructural costs (LARGE BARRIERS TO ENTRY)
- Reliance on established brand names discourages new competitors as years of experience is required
- Ownership of Resources/ Geographic location: Competitive disadvantage to new entrants as they may not have geographic rights
- Growing Shale Oil production threatens to decrease market share

## Threat of Substitutes (MEDIUM/HIGH)

- Low oil prices permits oil purchasers to be more selective on which prices they will take
- Possibility of substitute oil producers being of lower quality/ oil sweetness

### Bargaining Power of Buyers (MEDIUM)

- Low oil prices makes purchasers more sensitive to oil prices
- Small demand relative to supply

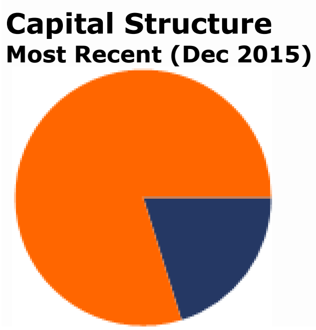
### Bargaining Power of Suppliers (MEDIUM/HIGH)

- Volume is critical to suppliers, and producers can threaten to cut volume and hurt profits for better prices
- Complex distribution channel adds to transportation costs
- High competition among suppliers of Oil & Gas

CHEVRON COPORATION SWOT ANALYSIS

## STRENGTHS

- Integrated Oil & Gas Company which also produces alternative sources of energy: solar, geothermal, biofuel, hydrogen, as well as wind power which shields it from negative drop in oil prices.
- Integrated company which does not need to rely on other businesses for varied processes in production and distribution
- Lower debt/equity ratio than peers despite oil decline (0.22)
- Continued increases in dividends despite low oil prices
- Gorgon LNG project in Australia expected to be completed in 2016 and will add cash flows for capital expenditure.
- High EPS relative to industry average (2.45: 0.5)




| Type | % | Amount |
|---|---|---|
| Debt | 20.2 | 38.6 Bil |
| Preferred | --- | --- |
| Equity | 79.8 | 152.7 Bil |

(Morningstar Credit Rating of AA-) which makes it unlikely to default on loans, i.e. VERY LOW DEFAULT RISK

## WEAKNESSES

- Operational issues in Gulf of Mexico could hurt company's production and increase repair related costs:: Focusing on selling shallow water assets to alleviate this issue
- Decreases in Net Income and Return on Equity as compared to previous years.
- Had to drop over 350 jobs on Gulf of Mexico because of unprofitable business
- Declining sales of refined products due to oversupply
- Declines in Oil & Gas reserves

## OPPORTUNITIES

- Continued field discoveries in areas like North Duri and Bangladesh
- Alternative energy resources, especially in nuclear energy can be profitable in future
- Increases in capital expenditures is a trend that is equating to higher margin growth

## THREATS

- The possibility of prolonged global recession especially in key consumption areas like China and Europe
- International Union Strikes and tighter oil regulations
- The volatility of oil prices

ANALYSIS OF SWOT

Chevron’s Strengths and Opportunities in many ways outweigh its opportunities and threats.

**THE NEGATIVES**

Chevron’s unprofitable operations in the Gulf of Mexico is partly responsible for its lowered quick ratio and negative operating cash flow in both 2014 and 2015. It has begun the process of reducing unprofitable operations there and freeing up needed cash by laying off over 300 workers, and cutting its costs. Return on equity has also been sharply affected, going from 12.65% in 2014, to 2.98% in 2015 which can be attributed to low oil prices, and unprofitable extraction, but could also signal mismanaging of resources. The drop in sales, and by extension, net income, has resulted in reduced EPS and net margin, however, in comparison to others in its subsector, Chevron is not the worst.

**THE POSITIVES**

Despite the fiscal lashings of below $40 per barrel oil prices, Chevron has managed to steadily increase dividends every year for the past 27 years. Its dividend yield is at 4.9%, compared to S&P 500 industry average of 2.5%. According to Morningstar, it also has a 20.8 forward PE ratio, compared to the 16.8 ratio of the S&P 500 average. Chevron’s opportunities for growth in alternative industries and oil exploration technology promise to provide high returns in the future as there is a trend towards more renewable and environmentally friendly sources of energy, i.e., its research into solar and nuclear energy. Also, the fact that Chevron is an integrated oil and gas company, it has and will continue to weather the storm of the volatility of the oil prices. Its linked processes prevent it from exploitation from other firms in terms of pricing, and its integrated process has allowed it to bounce back from oil prices quite well. Chevron’s large size, and widespread interests adds a bit of stability to an otherwise overly-sensitive market, and its reliable dividends makes it a top choice.


BFN BUSINESS FINANCE NEWS
Chevron
Buy

ANALYSIS OF PE, PROFIT MARGIN, LEVERAGE RELATIVE TO INDUSTRY/ SUBSECTOR

**Industry Peers** CVX

Get Price Quotes >>

| | Morningstar Rating | Market Cap Mil | Net Income Mil | P/S | P/B | P/E | Dividend Yield% | 5-Yr Rev CAGR% | Med Oper. Margin% | Interest Coverage | D/E |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Chevron Corp** | ★★★★ | **165,585** | **4,587** | **1.2** | **1.1** | **35.9** | **4.9** | **-7.5** | **15.7** | **—** | **0.2** |
| Exxon Mobil Corporation (USD) | ★★★★ | 341,730 | 16,150 | 1.3 | 2.0 | 21.4 | 3.6 | -6.8 | 13.2 | 71.6 | 0.1 |
| Royal Dutch Shell PLC (USD) | | 155,983 | 1,595 | 0.5 | 1.0 | 97.5 | 7.8 | 8.6 | 9.4 | 16.7 | 0.3 |
| Royal Dutch Shell PLC (USD) | | 154,834 | 1,595 | 0.5 | 1.0 | 96.8 | 7.8 | 8.6 | 9.4 | 16.7 | 0.3 |
| Royal Dutch Shell PLC (USD) | ★★★ | 153,940 | 1,595 | 0.5 | 1.0 | 96.2 | 7.8 | 8.6 | 9.4 | 16.7 | 0.3 |
| Royal Dutch Shell PLC (USD) | ★★ | 153,143 | 1,595 | 0.5 | 0.9 | 95.7 | 7.8 | 8.6 | 9.4 | 16.7 | 0.3 |
| PetroChina Co Ltd (USD,CNY) | ★★★ | 131,482 | 41,726 | 0.5 | 0.7 | 19.9 | 3.6 | 17.5 | 8.4 | 76.6 | 0.3 |
| Total SA (USD) | ★★★ | 114,354 | 1,055 | 0.7 | 1.2 | 116.3 | 5.7 | 2.4 | 11.9 | 33.2 | 0.4 |
| Total SA (USD) | | 111,021 | 1,055 | 0.7 | 1.2 | 112.9 | 5.9 | 2.4 | 11.9 | 33.2 | 0.4 |
| PetroChina Co Ltd (USD,CNY) | | 109,812 | 41,726 | 0.4 | 0.6 | 16.6 | 4.2 | 17.5 | 8.4 | 76.6 | 0.3 |
| BP PLC (USD) | ★★★★ | 95,266 | -7,582 | 0.4 | 0.9 | — | 7.7 | 7.8 | 5.0 | 5.3 | 0.5 |
| BP PLC (USD) | | 93,217 | -7,582 | 0.4 | 0.9 | — | 8.0 | 7.8 | 5.0 | 5.3 | 0.5 |
| China Petroleum & Chemical Corp (USD,CNY) | ★★★ | 75,545 | 28,071 | 0.2 | 0.7 | 23.7 | 5.0 | 16.0 | 3.5 | 7.4 | 0.1 |
| China Petroleum & Chemical Corp (USD,CNY) | | 71,559 | 28,071 | 0.2 | 0.7 | 22.4 | 5.3 | 16.0 | 3.5 | 7.4 | 0.1 |
| Eni SpA (USD,EUR) | ★★ | 54,258 | -2,745 | 0.5 | 0.8 | — | 7.1 | 5.6 | 11.8 | 2.0 | 0.3 |
| Eni SpA (USD,EUR) | | 51,678 | -2,745 | 0.5 | 0.8 | — | 7.5 | 5.6 | 11.8 | 2.0 | 0.3 |
| Statoil ASA (USD,NOK) | ★★★ | 50,603 | -37,200 | 0.8 | 1.2 | — | 5.6 | 6.0 | 25.9 | 29.8 | 0.7 |
| Statoil ASA (USD,NOK) | | 48,818 | -37,200 | 0.8 | 1.2 | — | 5.7 | 6.0 | 25.9 | 29.8 | 0.7 |
| Gazprom PJSC (USD,RUB) | | 46,298 | 276,654 | 0.6 | 0.3 | 12.3 | 5.6 | 13.3 | 30.2 | 7.9 | 0.2 |
| OJSC Rosneft Oil Co (USD,RUB) | | 39,477 | 393,000 | 0.6 | 1.0 | 7.4 | 3.9 | 31.3 | 13.4 | 6.5 | 0.7 |
| Suncor Energy Inc (USD,CAD) | ★★★ | 39,118 | -1,995 | 1.7 | 1.3 | — | 3.4 | -1.9 | 14.6 | -3.3 | 0.4 |
| Petroleo Brasileiro SA Petrobras (USD) | ★★★ | 34,307 | -8,751 | 0.3 | 0.5 | — | — | 9.4 | 13.6 | -1.8 | 1.6 |
| OJSC Rosneft Oil Co (USD,RUB) | | 31,794 | 393,000 | 0.5 | 0.8 | 5.9 | 4.9 | 31.3 | 13.4 | 6.5 | 0.7 |
| Imperial Oil Ltd (USD,CAD) | ★★★ | 28,089 | 1,122 | 1.4 | 1.6 | 33.7 | 0.8 | 1.4 | 13.6 | 50.3 | 0.3 |
| PJSC Lukoil (USD) | | 27,469 | 1,322 | 0.3 | 0.3 | 22.4 | 6.1 | 12.2 | 9.8 | 11.6 | 0.1 |
| Surgutneftegas OJSC (USD,RUB) | | 27,359 | 1,032,709 | 2.1 | 0.6 | 1.8 | 20.3 | 11.4 | 25.0 | 76295448.6 | — |
| **Industry Average** | | **42,747** | **69,423** | **0.6** | **1.1** | **142.0** | **5.0** | **11.3** | **-1423.6** | **1981556.0** | **0.4** |

PRICE EARNINGS RATIO:

Chevron’s PE ratio of 35.9 is a bit low compared to the industry average of 142 (mainly because of two outliers), however compared to the subsector average of 21.41, this price earnings ratio is very high. Its PE is higher than its biggest rival; Exxon Mobil 21.38, and it is listed to the top of Morningstar’s rating, right above Exxon Mobil. This high PE ratio means that investors see potential in Chevron and anticipate its growth to increase. Also, considering the fact that Chevron’s forward PE ratio is 20.8, compared to the S&P 500 average of 16.8, this is a good sign to invest in Chevron.

**Forward Valuation** CVX

| | CVX | Industry Avg | S&P 500 |
|---|---|---|---|
| Forward Price/Earnings | 20.8 | — | 16.8 |
| PEG Ratio | 0.0 | — | — |
| PEG Payback (Yrs) | — | — | — |

Data as of 03/04/2016.

(Morningstar Financials)

DEBT TO EQUITY/ LEVERAGE RATIO:

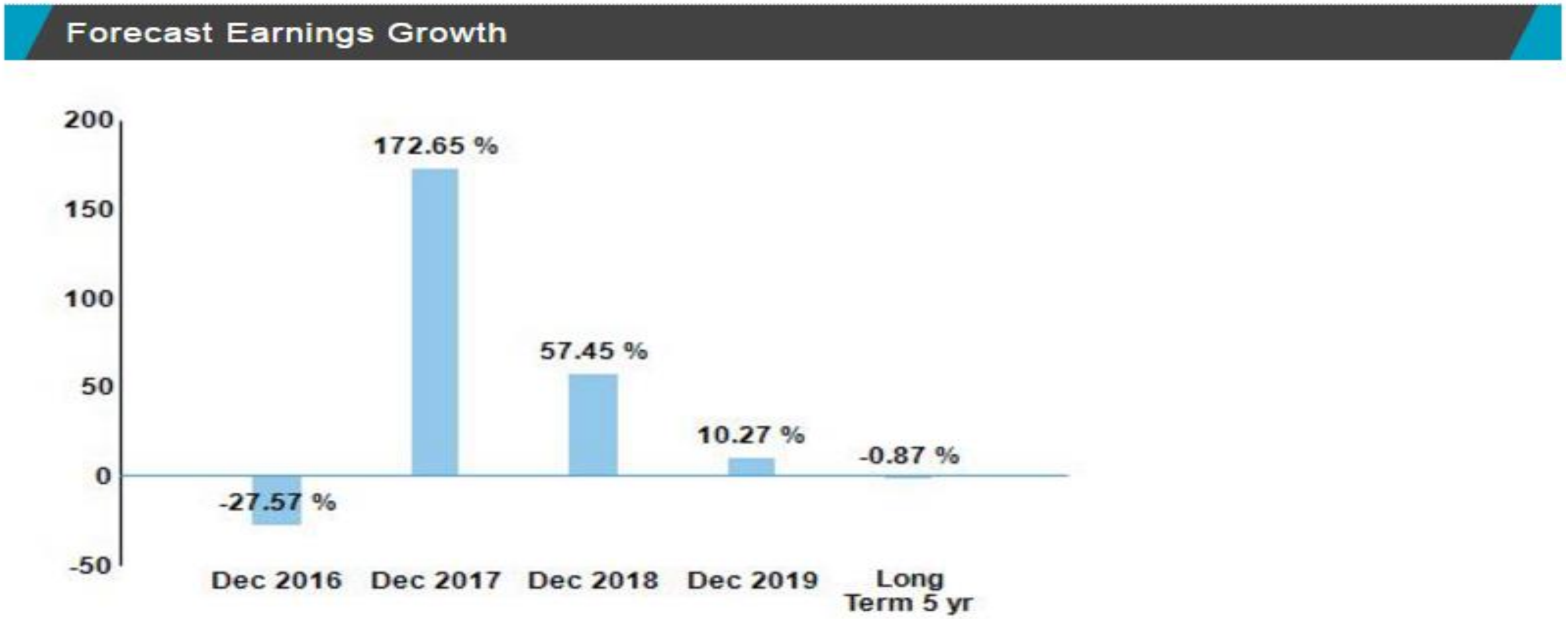
Chevron’s Debt to Equity is 0.2, compared to the industry average of 0.4, and the subsector average of 0.21. This is a bit high and accounts for why its beta is a bit high (1.16), in comparison to Exxon Mobil’s 0.88, however for an energy company, this is to be expected. Chevron is still weathering the effects of lower than average profits due to oil prices, and has had to rely on debt for capital expenditures such as its project in Australia last year. In comparison to the industry however, Chevron’s Debt to Equity ratio is relatively low, and since it has a AA- credit rating from Morningstar, its likelihood of default is quite slim.

PROFIT MARGIN RATIO:

Chevron's profit margin (using EBITDA) is 3.74, compared to the industry average of -1.28, and the sector average of 11.08. Chevron's profit margin is above both industry and subsector average and suggests that it Chevron is resilient to low oil prices. Chevron proves that it is able to weather low oil prices even with uncertainty looming about the direction of the industry. Despite midyear losses in the third quarter, Chevron has recouped and is cutting back on labor expenses in a bid to improve profits.

| DATES | DEBT/EQUITY RATIO | PROFIT MARGIN RATIO |
|---|---|---|
| 2011 | 0.08 | 10.60% |
| 2012 | 0.09 | 10.82% |
| 2013 | 0.13 | 9.36% |
| 2014 | 0.16 | 9.08% |
| 2015 | 0.22 | 3.74% |

NASDAQ PREDICTED EARNINGS GROWTH




Over the next five years, the analysts that follow this company are expecting it to grow earnings at an average annual rate of -0.87%. This year, analysts are forecasting earnings decrease of -27.57% over last year. Analysts expect earnings growth next year of 172.65% over this year's forecasted earnings.

**Data Provider:** Data is provided by Zacks Investment Research

QUANTITATIVE ANALYSIS

**Valuation of Stock Price**

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | |
| 2 | Inputs | | | Growth Calculations | | | Cost of Capital Calculations | |
| 3 | 2015 Net Income | $17,249,570,539.25 | | 2011 to 2012 Growth | -2.68% | | Cost of Equity/CAPM | 11.06% |
| 4 | US GDP Growth Rate | 2.40% | | 2012 to 2013 Growth | -18.18% | | Cost of Debt | 0.92% |
| 5 | Risk Free Rate | 1.74% | | 2013 to 2014 Growth | -10.18% | | Weight of Equity | 80.79% |
| 6 | Expected Market Return | 10.00% | | Average Growth | -10.35% | | Weight of Debt | 19.21% |
| 7 | Income before Tax | $31,200,000,000.00 | | Terminal Growth | 2.40% | | Tax Rate | 38.11% |
| 8 | Beta (Find 2 sources and average them) | 1.13 | | | | | WACC | 9.05% |
| 9 | Long Term Debt | $38,590,000,000.00 | | | | | | |
| 10 | Interest Expense | $358,000,000.00 | | | | | | |
| 11 | Short Term/Current Long Term Debt | $126,000,000.00 | | | | | | |
| 12 | Market Cap | $162,800,000,000.00 | | | | | | |
| 13 | Tax Expense | $11,890,000,000.00 | | | | | | |
| 14 | 2014 Net Income | $19,240,000,000.00 | | | | | | |
| 15 | 2013 Net Income | $21,420,000,000.00 | | | | | | |
| 16 | 2012 Net Income | $26,180,000,000.00 | | | | | | |
| 17 | 2011 Net Income | $26,900,000,000.00 | | | | | | |
| 18 | Cash | $11,020,000,000.00 | | | | | | |
| 19 | Actual Stock Price | 86.5 | | | | | | |
| 20 | Shares Outstanding | 1870000000 | | | | | | |
| 21 | Undervalued or Overvalued? | Overvalued | | | | | | |
| 22 | | | | | | | | |

| | I | J | K | L | M | N | O |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | Discounted Cash Flows | | | |
| 3 | | 2016 | 1 | $15,465,056,329.97 | $14,182,200,406.40 | | |
| 4 | | 2017 | 2 | $13,865,154,888.63 | $11,660,279,188.37 | | |
| 5 | | 2018 | 3 | $12,430,767,530.62 | $9,586,813,530.68 | | |
| 6 | | 2019 | 4 | $11,144,771,381.31 | $7,882,057,726.68 | | |
| 7 | | 2020 | 5 | $9,991,814,973.27 | $6,480,446,689.39 | | |
| 8 | | | Sum | | $49,791,797,541.52 | | |
| 9 | | | Terminal | | $99,856,177,941.18 | | |
| 10 | | | Total Equity | | $149,647,975,482.70 | | |
| 11 | | | EV | | $121,951,975,482.70 | | |
| 12 | | | Stock Price Based on Intrinsic Value | | $65.21 | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |

**Investment Valuation using Muhkerji Model @ 8% Expected Return**

B10 =B9-B8

| | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| 1 | Chevron Corporation (NYSE-CVX) | FUNDAMENTAL STOCK VALUATION | | | | | |
| 2 | | | | | | | |
| 3 | WEIGHTED AVERAGE COST OF CAPITAL | | | | | | |
| 4 | Value Line Beta | 1.15 | | Market Value of Equity | | | 165,308,400,000 |
| 5 | Yahoo Beta | 1.17 | | Long Term Debt | | | 38,104,000,000 |
| 6 | Average Beta | 1.16 | | Long Term Interest | | | 422,700,000 |
| 7 | Adjusted Beta | 1.11 | | Cost of Debt | | | 1.11% |
| 8 | Treasury Bill Return | 3.50% | | Income Tax Rate (2018-20) | | | 38.00% |
| 9 | Expected Market Return | 8.00% | | Proportion of Equity | | | 81.27% |
| 10 | Market Risk Premium | 4.50% | | Proportion of Debt | | | 18.73% |
| 11 | Cost of Equity | 8.48% | | Weighted Average Cost of Capital | | | 7.099% |
| 12 | Shares Outstanding | 1,880,000,000 | | Average Annual P/E Ratio (2018-20) | | | 12.00 |
| 13 | Stock Price | $87.93 | | | | | |
| 14 | | | | | | | |
| 15 | | (Millions of Dollars) | | | | | |
| 16 | Current and Projected Amounts | 12/31/16 | 12/31/17 | 12/31/18 | 12/31/19 | 12/31/20 | 12/31/21 |
| 17 | Working Capital | $16,700,000,000 | $17,000,000,000 | $18,012,500,000 | $19,025,000,000 | $20,037,500,000 | $21,050,000,000 |
| 18 | Capital Spending per Share | | $12.35 | $12.81 | $13.28 | $13.74 | $14.20 |
| 19 | Common Shares Outstanding | | 1,865,000,000 | 1,866,250,000 | 1,867,500,000 | 1,868,750,000 | 1,870,000,000 |
| 20 | Long-Term Debt | 35,400,000,000 | 32,000,000,000 | 31,075,000,000 | 30,150,000,000 | 29,225,000,000 | 28,300,000,000 |
| 21 | Interest Payment | | 354,986,353 | 344,725,029 | 334,463,705 | 324,202,380 | 313,941,056 |
| 22 | | | | | | | |
| 23 | FINANCIAL PROJECTIONS | | 12/31/17 | 12/31/18 | 12/31/19 | 12/31/20 | 12/31/21 |
| 24 | Net Profit | | 7,835,000,000 | 10,738,750,000 | 13,642,500,000 | 16,546,250,000 | 19,450,000,000 |
| 25 | + Depreciation | | 18,600,000,000 | 18,327,500,000 | 18,055,000,000 | 17,782,500,000 | 17,510,000,000 |
| 26 | - Increase In Working Capital | | (300,000,000) | (1,012,500,000) | (1,012,500,000) | (1,012,500,000) | (1,012,500,000) |
| 27 | - Capital Spending | | (23,032,750,000) | (23,911,328,125) | (24,791,062,500) | (25,671,953,125) | (26,554,000,000) |
| 28 | + New Borrowing | | (3,400,000,000) | (925,000,000) | (925,000,000) | (925,000,000) | (925,000,000) |
| 29 | + After-tax Interest Payment | | 19,840,000,000 | 19,266,500,000 | 18,693,000,000 | 18,119,500,000 | 17,546,000,000 |
| 30 | | | | | | | |

B10 | =B9-B8

| | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| 1 | **Chevron Corporation (NYSE-CVX)** | **FUNDAMENTAL STOCK VALUATION** | | | | | |
| 2 | | | | | | | |
| 3 | **WEIGHTED AVERAGE COST OF CAPITAL** | | | | | | |
| 4 | Value Line Beta | 1.15 | | Market Value of Equity | | | 165,308,400,000 |
| 5 | Yahoo Beta | 1.17 | | Long Term Debt | | | 38,104,000,000 |
| 6 | Average Beta | 1.16 | | Long Term Interest | | | 422,700,000 |
| 7 | Adjusted Beta | 1.11 | | Cost of Debt | | | 1.11% |
| 8 | Treasury Bill Return | 3.50% | | Income Tax Rate (2018-20) | | | 38.00% |
| 9 | Expected Market Return | 8.00% | | Proportion of Equity | | | 81.27% |
| 10 | Market Risk Premium | 4.50% | | Proportion of Debt | | | 18.73% |
| 11 | Cost of Equity | 8.48% | | Weighted Average Cost of Capital | | | 7.099% |
| 12 | Shares Outstanding | 1,880,000,000 | | Average Annual P/E Ratio (2018-20) | | | 12.00 |
| 13 | Stock Price | $87.93 | | | | | |
| 14 | | | | | | | |
| 15 | | **(Millions of Dollars)** | | | | | |
| 16 | **Current and Projected Amounts** | **12/31/16** | **12/31/17** | **12/31/18** | **12/31/19** | **12/31/20** | **12/31/21** |
| 17 | Working Capital | $16,700,000,000 | $17,000,000,000 | $18,012,500,000 | $19,025,000,000 | $20,037,500,000 | $21,050,000,000 |
| 18 | Capital Spending per Share | | $12.35 | $12.81 | $13.28 | $13.74 | $14.20 |
| 19 | Common Shares Outstanding | | 1,865,000,000 | 1,866,250,000 | 1,867,500,000 | 1,868,750,000 | 1,870,000,000 |
| 20 | Long-Term Debt | 35,400,000,000 | 32,000,000,000 | 31,075,000,000 | 30,150,000,000 | 29,225,000,000 | 28,300,000,000 |
| 21 | Interest Payment | | 354,986,353 | 344,725,029 | 334,463,705 | 324,202,380 | 313,941,056 |
| 22 | | | | | | | |
| 23 | **FINANCIAL PROJECTIONS** | | **12/31/17** | **12/31/18** | **12/31/19** | **12/31/20** | **12/31/21** |
| 24 | Net Profit | | 7,835,000,000 | 10,738,750,000 | 13,642,500,000 | 16,546,250,000 | 19,450,000,000 |
| 25 | + Depreciation | | 18,600,000,000 | 18,327,500,000 | 18,055,000,000 | 17,782,500,000 | 17,510,000,000 |
| 26 | - Increase In Working Capital | | (300,000,000) | (1,012,500,000) | (1,012,500,000) | (1,012,500,000) | (1,012,500,000) |
| 27 | - Capital Spending | | (23,032,750,000) | (23,911,328,125) | (24,791,062,500) | (25,671,953,125) | (26,554,000,000) |
| 28 | + New Borrowing | | (3,400,000,000) | (925,000,000) | (925,000,000) | (925,000,000) | (925,000,000) |
| 29 | + After-tax Interest Payment | | 19,840,000,000 | 19,266,500,000 | 18,693,000,000 | 18,119,500,000 | 17,546,000,000 |
| 30 | | | | | | | |

B10 =B9-B8

| | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| 42 | **DISCOUNTED FCFTF VALUATION** | **03/06/16** | **12/31/17** | **12/31/18** | **12/31/19** | **12/31/20** | **12/31/21** |
| 43 | Free Cash Flows to Firm (FCFTF) | | 22,942,250,000 | 23,408,921,875 | 24,586,937,500 | 25,763,796,875 | 26,939,500,000 |
| 44 | Terminal Value of FCFTF | | | | | | 261,700,000,000 |
| 45 | Total FCFTF | | 22,942,250,000 | 23,408,921,875 | 24,586,937,500 | 25,763,796,875 | 288,639,500,000 |
| 46 | Present Values of Total FCFTF | | 20,250,740,126 | 19,292,996,292 | 18,920,651,301 | 18,512,065,882 | 193,648,510,285 |
| 47 | Enterprise Value | $280,066,502,371.22 | | | | | |
| 48 | Total Cash | 11,330,000,000 | | | | | |
| 49 | Market Value of Firm | 291,396,502,371 | | | | | |
| 50 | Total Debt | 39,590,000,000 | | | | | |
| 51 | Market Value of Equity (FCFTF Method) | 251,806,502,371 | | | | | |
| 52 | **Stock Value (FCFTF Method)** | **$133.94** | | | | | |
| 53 | | | | | | | |
| 54 | **COMPARABLES VALUATION** | **COMPETITORS** | | | **INDUSTRY** | **MEDIAN** | |
| 55 | **Market Value Ratios** | **XOM** | **BP** | **RDS** | | | |
| 56 | PEG Ratio | 2.75 | 3.10 | | 0.72 | 2.75 | |
| 57 | | | | | | | |
| 58 | **Company's Earnings and Growth** | | | | | | |
| 59 | Earnings per Share (TTM) | 2.45 | | | | | |
| 60 | Next 5 Years' Annual Growth Estimate (%) | -23.86 | | | | | |
| 61 | **Stock Value (Comparables Method)** | **($160.76)** | | | | | |
| 62 | | | | **Brokers' Price Target & Recommendation Summary** | | | |
| 63 | **Estimated Stock Value** | **$89.25** | | High | | | $122.00 |
| 64 | | | | Mean | | | $94.05 |
| 65 | **12-Month Target Price** | **$96.82** | | Median | | | $92.50 |
| 66 | **Projected 1-Year Gain** | **9.18%** | | Low | | | $76.00 |
| 67 | **Forward Annual Dividend Yield** | **4.91%** | | No. of Brokers | | | 22 |
| 68 | **Projected 1-Year Return** | **14.09%** | | Mean Recommendation | | | 2.3 |
| 69 | **Treynor Index** | **0.10** | | | | | |
| 70 | **Excess Return** | **5.61%** | | | | | |
| 71 | **Investment Recommendation** | **BUY** | | | | | |

CVX1 CVX2

MOVING FORWARD: 10 STATISTICS/HEADLINES/ TRENDS TO LOOK FORWARD TO IN COMING 6 MONTHS

1. Oil expected to remain low until mid to late 2017 due to smaller demand from China and Paris climate agreement
2. Total US production is expected to decline into the end of 2016
3. Increase in Asian demand for oil due to surge in vehicle purchases
4. Reforming labor relations due to rapid job cuts
5. Technology solutions to refine drilling processes and reduce costs such as 4D Seismic technology and 3D printing
6. Increasing partnerships and joint ventures to buffer low oil prices
7. Huge sales of assets to alleviate cash flow problems and due to failing/ low performance refineries
8. Bloomberg New Energy predicts that Solar energy will account for 35% of new power generation infrastructure in the next 25 years
9. Decline in the US of coal as an energy resource to combat growing concerns about air pollution in countries like China and Paris. Coal industry fell about 25% last year.
10. Inflation expected to slightly increase oil prices

SALES MIX OF CHEVRON PRODUCTS

In Chevron's 2014 annual report, it categorizes its sales revenue according to UPSTREAM, DOWNSTREAM (US and International), and All Other. Its Upstream and Downstream revenue is the biggest portion of its sales revenue and consists of all activities related to the extraction and production of oil and its products such as LNG. Whilst 'All Other' consists of mining activities, power and energy services (alternative energy) and technology companies. In 2015, Chevron's 'All Other' revenue section comprised about 9.36% of its Chevron Corp. revenue ($19.2 B). This is about $180 M in revenue. A large portion of this comes from energy services provided in Thailand. According to the 2014 Annual report, and recent briefings from its CEO, Chevron's focus is on minimizing expenditure on alternative investments, and focusing more on upstream and downstream operations to improve cash flow. Its focus is on improving technology in the 'All Other' section that will improve the upstream and downstream performance.

## Corporate Strategies (Chevron 2015 factsheet)

*• Financial-return objective – Create shareholder value and achieve sustained financial returns from operations that will enable Chevron to outperform its competitors.*

*• Enterprise strategies –Execute with excellence through rigorous application of the company's operational excellence and capital stewardship systems and disciplined cost management. Grow profitably by using competitive advantages to maximize value from existing assets and capture new opportunities.*

*• Major business strategies – Upstream: Grow profitably in core areas and build new legacy positions. Downstream: Deliver competitive returns and grow earnings across the value chain. Gas and Midstream: Apply commercial excellence in supply, trading and transportation to enable success of Upstream and Downstream strategies. Technology: Differentiate performance through technology.*

FINAL RECOMMENDATION

Despite the gloomy prospects of the oil industry and the overall feeling of uncertainty amongst buyers, Chevron Corporation is the stock to purchase in the energy sector right now. Its large size and scope (being an integrated oil & gas company) has allowed it to weather the storm of the low energy prices, unlike many other companies in other subsectors like refining and marketing. Chevron has used it size, and variety to its advantage and has been able to maintain increased dividends despite mid quarter loses, and cash flow problems. It has shown its priority to put shareholder returns first, despite lower than expected profit. The main reasons to purchase Chevron comes down to return. Chevron's debt/equity is really good compared to the industry and its gross margin, despite horrible market conditions, has increased from 2014 to 2015 year end (31.6 to 33%). Its payout ratio has also increased from 38.1% to 93%, which means, despite reduced income, Chevron continues to pay out increased dividends to its shareholders. For investors that are looking for a steady return on investment, Chevron is viewed highly.

Also, many analysts and researchers predict an increase in oil by mid to the end of 2017, which can alleviate the income issues associated with Chevron. Conversations with a senior Morgan Stanley analyst sales and trading reveal predictions that oil will improve in the year 2017. He admits that China's apparent slowed growth is an issue because of the government's lies about figures, however maintains that there will be a market for oil in the future.  In the meantime, Chevron will benefit from the sell-off of other companies' assets at low costs, which will reduce competition and free up market share, as well as improve its own financial position. Chevron has weathered the worst of the oil crisis, and continues to grow and recoup. A company that is as resilient as Chevron in times of economic pressure is not only a good company, but promises to be a great investment.