

Five-year Stock Price Comparisons of High-Fossil Stock Holdings

Prepared for Vermont Government Operations Committee

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Abstract

As supplemental information to the memo and testimony provided, the following charts aim to provide substantive evidence to consider and assist in the decision-making process regarding the divestment of currently held high-fossil stocks. The charts examine the five year historical stock prices of the three largest oil & gas and coal companies in the U.S. Market. Performance is based on stock price comparisons to the S&P 500.

Data Sources and Specifications

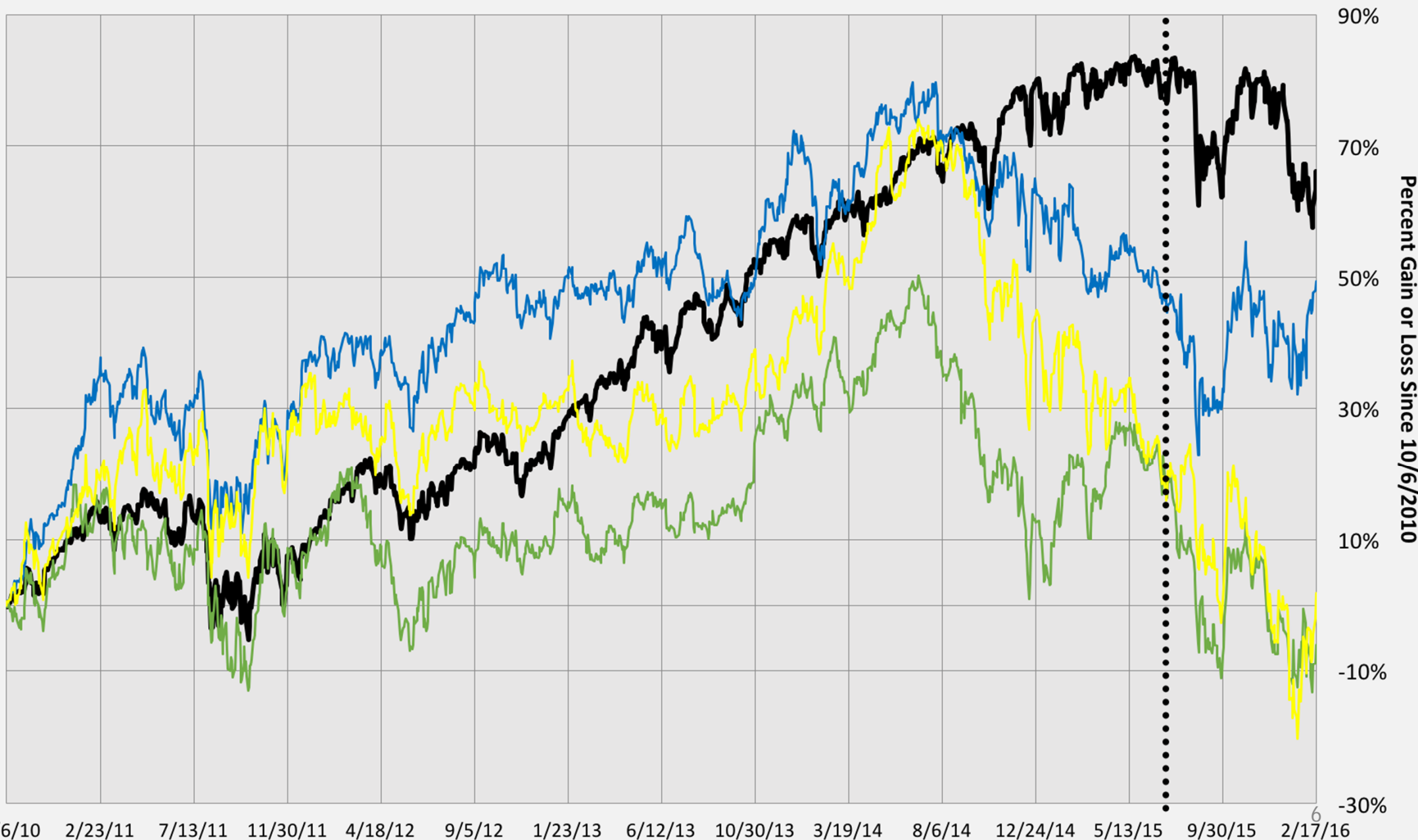
- Largest Oil & Gas and Coal Companies are based on total carbon reserves as of 2015
- Two large coal companies, Arch Coal (ACI) and Alpha Natural Resources (ANR) have gone bankrupt since October 2015, and thus were not included.
 - Reserves of ACI and ANR are higher than Rio Tinto and Cloud Peak by about 2-3 Gt CO₂
- Historical stock price data and market capitalization values obtained from Yahoo! Finance®
- Data compiled and graphics generated by Brandon Oldham, brandonoldham@vermontlaw.edu, Research Associate at Institute for Energy and the Environment | Vermont Law School

Contents

- Five Year Stock Price Comparison Charts
- Largest Oil & Gas Companies include:
 - Exxon (XOM), British Petroleum (BP), Royal Dutch Shell (RDS-B)
- Largest Coal Companies include:
 - Peabody (BTU), Rio Tinto (RIO), Cloud Peak Energy (CLD)

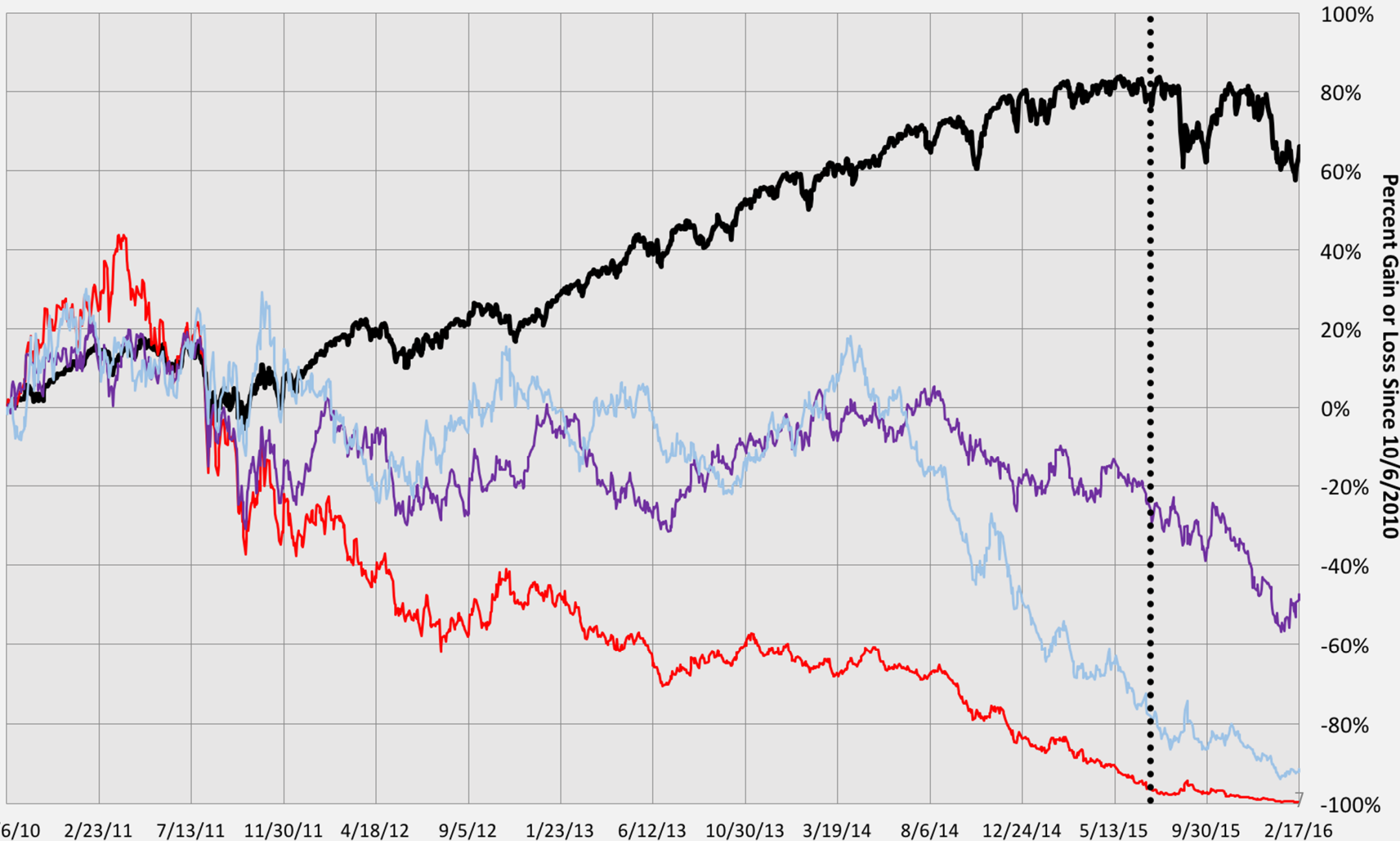
5 Year Daily Close Stock Price Comparison of Largest Oil & Gas Companies against the S&P 500

— S&P 500 — XOM — BP — RDS-B



5 Year Daily Close Stock Price Comparison of Largest Coal Companies against the S&P 500

— S&P 500 — BTU — RIO — CLD



Key Takeaways

- The largest oil & gas companies have consistently underperformed the S&P 500 over the last five years by an approximate margin of 40%
- The largest coal companies have consistently underperformed the S&P 500 over the last five years by an approximate margin of -100%
- There is strong reason to believe these stocks will continue to lose value in the mid to long term future due to
 - Increased supply
 - Reduced demand