Krause Fund Research

Energy: Independent Upstream Oil and Gas Exploration and Production

This report is published by:
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Date: 04/11/2023 **Current Price: $228.48** **Target Price: $211.48 - $235.64**
Ticker: NYSE: PXD **Headquarters: Irving Texas, U.S.** **Recommendation: HOLD**

Current Price: $228.48
Price Target: $ $225-$235

Price Data
Current Price: $228.48
52-week Low: $177.27
52-week High: $228.79

Key Statistics
Market Capitalization: $53.4 billion
Shares Outstanding: 242.9 mil
Beta: 1.44
Forward P/E Ratio:
Dividend Yield: 13.09%
2022 Revenue: $14.6 billion
2023E Revenue: $24.3 billion

Valuation Prices
Discounted Cash Flow: $226.13
DDM: $211.66
Relative P/E: $226.35
NAV: $235.64

PXD 5yr Performance: as of 4/24/23

Investment Thesis

We issue a HOLD recommendation on Pioneer Natural Resources (PXD) based on a one-year target price of **$235.34**, offering a 11.4% upside potential from its closing price of $220.39 on April 11, 2023. Our recommendation is driven by:

- **Operational Performance** - Pioneer currently operates 10,702 prodcuing oil and gas rigs in the heart of the Permian Basin. According to a production report released by Enverus in Q1 of 2023, Pioneer was the most active driller and largest producer of oil in the state of Texas. A driving factor of their position in the Permian Basin was In FY2022 they were able to expand their 15,000' lateral program. By being able to increase the drilling depth to 15,000ft it has allowed for more cost-effective production.
- **Strategic Partnerships** - In Q4 of FY2022 It was announced that Pioneer Natural Resources will partner with NextEra Energy and Conocho Valley Solar to provide three hundred megawatts (mW) of renewable wind energy to power operations in the Permian Basin. By creating partnerships with companies that are taking part in the energy transition it can allow for Pioneer to further innovate and invest in cleaner energy and diversify from their traditional operations as the energy transitions has posed major threat to Pioneer and other companies alike.
- **Capital Deployment Efficiency** - Pioneer was able to effectively deploy capital and invest in more proved reserves. In FY2022 Pioneer was able to add an additional 365 MMBOE of proved reserves of oil. This is 152% of total production in FY2022 at a cost of $10.82 per BOE beating their forecasted figure in 2021 of $13.20 per BOE.[16]
- **Risks to Investment Thesis -** Every exploration and production company faces is the price volatility of oil, NGLs and gas are highly volatile. Revenues for these companies are based on the spot price that is determined by the market and not by

Company Overview

Headquartered in Irving, TX, Pioneer Natural Resources is an independent oil and gas exploration and production that primarily operates drilling projects in the Permian Basin located in West Texas. Through a history of strategic acquisitions, Pioneer has been able to position itself amongst the major exploration and production companies.

Executive Summary

We recommend a **HOLD** rating for Pioneer Natural Resources due to the strong operational performance, strategic partnerships centered around renewable energy, capital deployment efficiency. We have projected a common stock price of $211.48-$235.64, a 11.4% upside from the closing price of $220.39 on April 11, 2023. Pioneer was able to effectively deploy capital and invest in more proved reserves. In FY2022 Pioneer was able to add an additional 365 MMBOE to the ending balance of last year's proved reserves. Pioneer successfully replenished their reduced reserve balance from production by generating 152% of their total FY2022 production. By investing more into producing horizontal drills, the company has been able to reduce their average cost per BOE to $10.82, compared to previous year's estimates of $13.20/BOE. On April 7th of this year, Exxon Mobil announced that they have held informal talks with Pioneer Natural Resources surrounding a possible acquisition. After Exxon recorded a $3.4 billion loss early in 2022 due to exposure to the Russia-Ukraine conflict, they have been trying to grow a stronger presence in North America. Since the news was released, Pioneer's stock is up 9.62%, to $228.39.

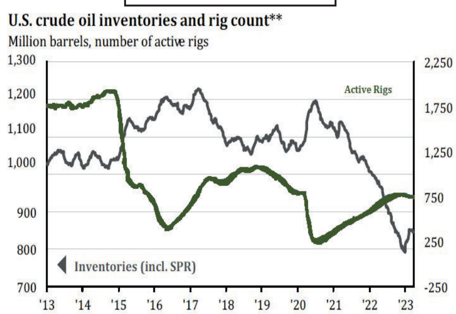
Economic Analysis

Change in production and consumption of liquid fuels

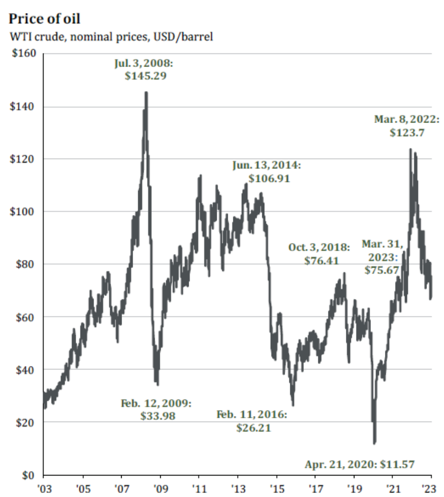
Production, consumption and inventories, millions of barrels per day

Production	2019	2020	2021	2022	2023	Growth since '19
U.S.	19.5	18.6	19	20.2	21.2	7.90%
OPEC	34.6	30.7	31.7	34.2	34.1	-1.60%
Russia	11.5	10.5	10.8	10.9	10.3	-10.30%
Global	**100**	**93.9**	**95.7**	**99.9**	**102**	**1.20%**
Consumption						
U.S.	20.5	18.2	19.9	20.3	20.5	-0.4%
China	14	14.4	15.3	15.2	15.9	13.20%
Global	**101**	**91.6**	**97.1**	**99.4**	**101**	**0.0%**
Change	-0.6	2.3	-1.4	0.4	0.6	

Source: EIA, JPMI



Source: EIA, JPMI

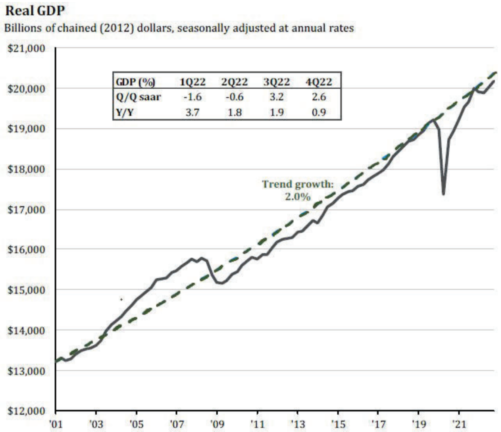


Source: EIA, JPMI

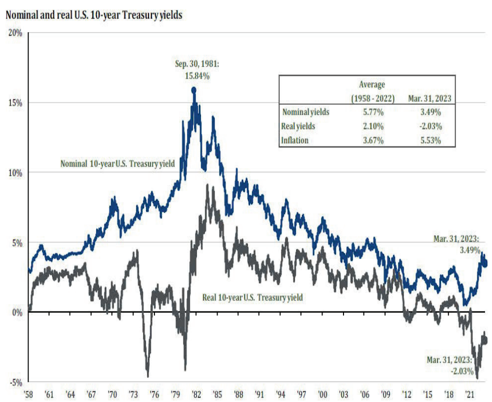
As the world and economy are transitioning out of the pandemic, there are positive tailwinds for the energy industry, and more specifically, for the exploration and production companies in the Oil and Gas sector. Production across the industry has seen an increase over the past year as well. This led to record profits across the industry and largely due to geopolitical tensions, we saw the average spot price of oil reach 95.66 $/bbl.[19] For the Oil and Gas industry, oil prices are the predominate factor in determining future performance in the exploration and production sector. This increase in price in oil has helped contribute to the inflation increase in 2022. With recent guidance provided by The United States Federal Reserve, we are under the assumption that inflation will taper down to a YoY% change of 5.0%. This is supported by the Federal Reserve's plan to decrease the acceleration of interest rate growth by adopting a soft-landing philosophy when it comes to combating inflation (Saphir, 2023). Changes in the production of crude oil, interest rates, and international policy are extremely impactful to the performance of Pioneer Natural Resources.

West Texas Intermediate Outlook – In 2018, the United States took the lead as being the largest producer of crude oil in the world. The importance of control over crude oil supply is essential to the power of a country due to the commodity being seen as the global benchmark for oil prices. In the past year,
OPEC+ members have given misleading information that contradict their actual production cut of 3.66 mb/d which will take a year or two to go into full effect. The surprise announcement on April 3rd caused the spot price of WTI to jump above $80 again which would help compensate for the Russian export bans put in place by western countries. Another instance of collusion may has occurred because of OPEC+ not wanting the United States to be able to refill the Strategic Petroleum Reserve (SPR). Earlier this April, OPEC+ announced they would not update more make any changes to current production quotas and they would remain the same for the rest of 2023. At the time, there were no announcements of no new production cuts decrease the WTI price to $70/ bbl. This was the price target the Biden Administration wanted to achieve to start replenishing the drained the national Strategic Petroleum Reserve. This $70/bbl. was the price the administration was targeting due to the most recent WTI spot prices in 2022 hovering over $100/bbl. Following the announcement from the Biden Administration, OPEC+ announced that they would cut oil production by 1.66 million barrels per day, including a 0.5 million barrel per day reduction from Russia. OPEC leaders cited an uncertain demand outlook as the reason behind their decision. With higher-than-expected WTI spot prices, it is critical for Pioneer to capitalize on available demand for oil.

Worldwide Energy Supply and Demand – Global levels of supply and demand for oil are the biggest factors in determining the market price for the commodity. Since upstream oil and gas companies' revenue is determined by the spot price of the commodities which they extract and
sell, they have little control over their primary revenue streams. Oil and gas prices tend to be cyclical in nature, which causes energy companies' revenues to be cyclical as well. Over the past year, much of the volatility in commodity prices has been due to supply chain constraints and geopolitical issues. The supply of oil in global markets is dependent on quotas that OPEC member-countries agree upon at meetings throughout the year. The largest producers in OPEC are Saudi Arabia, Iraq, and the United Arab Emirates, and their objective is "to coordinate petroleum policies among member countries, in order to secure fair and stable prices for petroleum producers". Global oil demand is forecasted to be 101.7 mb/d in 2023, which would be a 1.9 mb/d increase from 2022 and the highest level of demand for oil ever recorded. The global supply for oil is expected to reach an all-time high in 2023 as well, increasing from 100.1 mb/d in 2022 to 101.1 mb/d in 2023 (IEA). The driving factor for volatility in oil prices throughout 2022 was due to export bans, sanctions, and price caps placed on Russian oil. Since upstream oil and gas companies' revenue is determined by the spot price of the commodities which they extract and sell, they have little control over their revenue streams. The largest factor which the supply of oil depends on, is the production quota that OPEC+ countries agree upon at their meetings throughout the year. OPEC-producing countries account for about "40% of the world's crude oil and its members' exports make up around 60% of global petroleum trade" (source 2). While OPEC members aim to stabilize global oil prices by means of production quotas, it is often hard to meet short term demand/supply imbalances and takes months for members to meet the agreed-upon quota.

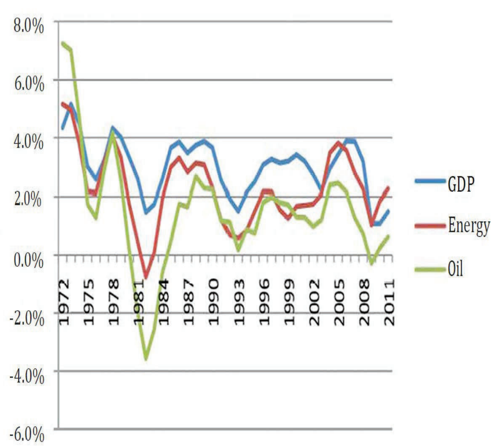


Source: EIA, JPMl



Source: EIA, JPMl

World Growth in GDP, Energy, and Oil



Source: S&P Global

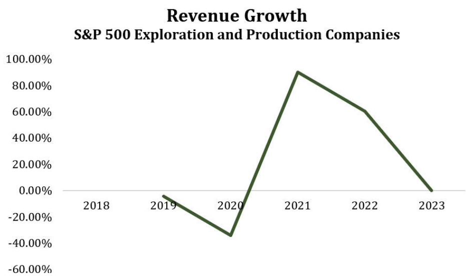
Real GDP - Real GDP is an economic measurement of global output of goods and services that is adjusted for inflation. The real GDP and WTI spot price, which is the price at which Pioneer's production is priced, are positively correlated. This is because as output for goods and services grows, the need to fuel those operations also increases. According to the EIA, global oil production grew by 1.20%, while real GDP growth was 2.1%. Pioneer experienced its own production growth from 2021 to 2022, with a 5.7% increase. In 2022, The worldwide Real GDP grew by 2.9%. As coming out of 2021, we saw growth slow down due to demand and output leveling out after rapid growth coming out of the COVID-19 Pandemic in 2020. Growth prospects for 2023 however do not look as bright. According to the most current report released by Global Economic Prospects, Real GDP growth is expected to grow at a measly 1.7% (insert source) due to concerns over tight monetary policy and rising geopolitical tensions. These two issues can pose a threat to Pioneer's production volume. If Real GDP were to drive down the demand for oil and increase interest rates it would limit Pioneer's ability to access new capital, engage in M&A, and lead to decrease in revenues.

Interest Rates - Interest rates affect Pioneer and other companies ability to raise debt and pursue potential mergers and acquisitions. Recent FED policies and the causes of rate hikes are due to the inflation. The large amount of government spending to stimulate and support the world economy during the pandemic is coming with a hefty price. The leading indicator of inflation, the consumer price index, reflected a 6.5% increase in prices among consumer goods and services. If the cost of an input to the supplier increases, they, in turn, must increase the prices charged to the consumer to maintain stable profit margins. With recent guidance provided by The United States Federal Reserve, we are under the assumption that inflation will taper down to a YoY% change of 5.0%. This is supported by the Federal Reserve's plan to decrease the acceleration of interest rate growth by adopting a soft-landing philosophy when it comes to combating inflation (Saphir, 2023). As the world and economy are recovering from the pandemic, there is a positive long-term outlook for economies returning to pre-pandemic levels. Some industries and governments may take longer than others, but the exploration and production sector have made a strong recovery and are showing signs of complete recovery with potential upside**.**

Legislative Developments - President Biden has recently announced that by 2050, The United States will attempt to achieve net zero carbon emissions. The Biden Administration has approved legislation such as the Infrastructure Investment and Jobs Act (U.S.). The act emphasizes increases investment in EV's, electric grids, and clean energy technologies, and promotes partnerships being forged through new investment. A key aspect of this legislation is that it will limit the ability for exploration and production companies to get their land leases approved. To continue to drill on federal land, E&P's companies request approval from the federal government. With this new legislation, lesser quantities of land leases will be approved on the twenty-nine million acres of federal land available for drilling. President Biden also increased the royalty rates across the board for federally available land with "most states and many private landowners require companies to pay royalty rates higher than 12.5%, with some states charging 20% or more" (NPR). Pioneer Natural Resources is well positioned against the negative effects other drillers may face due to Pioneer not having any drilling locations on land. Pioneer does not pay any royalties on their 850,000 net acres. To further support the Biden Administration's goal of achieving net zero carbon emissions several new renewable programs were also outlined in The Inflation Reduction Act. The act was signed on August 16, 2022, has impacted, and will play a significant role in future analysis. This piece of legislation could pose future risk to oil demand as firms are being paid in the form of carbon credits and tax rebates to use an alternative source of fuel on the basis of an ESG rating

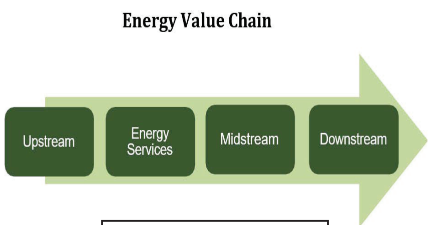
Geopolitical Conflicts - During the COVID-19 pandemic, the United States had to withdraw a large stockpile of oil from the Strategic Petroleum Reserve and has had a challenging time replacing the oil due to high spot prices of WTI oil. Due to the recent failure of regional banks and increased fears of recession, real commodity prices have dropped across the market. OPEC+ claimed that they would leave production quotas alone throughout 2022, until they announced a 3.66 mb/d production cut once the price of oil came close to $70 a barrel. This unprecedented change to production quotas has caused "U.S. officials to say high energy prices help Russia to fund its war on Ukraine" (WSJ.com). Volatility of oil prices and uncertain production quotas could cause a large amount of volatility in oil markets until the tension between Russia and Ukraine are dissolved.

Industry Overview and Outlook



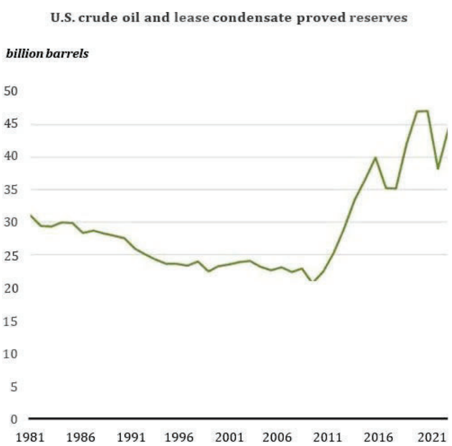
Source: CFRA

The Four Verticals of Oil and Gas - The oil and gas industry are comprised of 4 different sectors: oilfield services, upstream, midstream, and downstream. Upstream oil and gas companies focus on the exploration, development, and production of natural resources. Pioneer is an upstream oil and gas company since their operations consist of locating oil reserves, establishing drills, and extracting the oil and gas from the reserves. The midstream sector's operations consist of gathering, transporting, storing, and distributing the natural resources which the upstream companies extract. Downstream companies are responsible for refining and processing oil and gas into end products which they then distribute to consumers. Oilfield service companies are responsible for providing the products and services required for exploration and production companies to operate efficiently. They provide everything from energy data to helicopters that help construct offshore oil rigs. While upstream oil and gas companies are the ones taking on much of the financial risk by locating new reserves and establishing drills, the energy chain works as one to help reduce costs and increase efficiency of supplying end products.



Source: CFRA

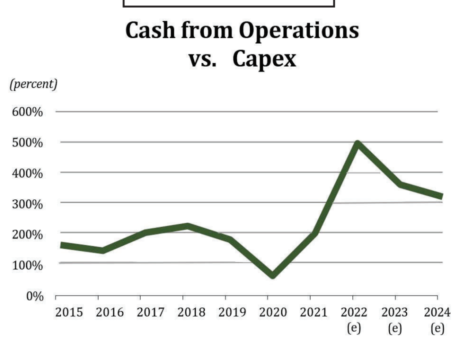
Oil and Gas Price and Volumes - For upstream oil and gas revenue is determined based on the simple equation, volume sold x spot price = revenue. Producers such as Pioneer are subject to fluctuations in the price of WTI Crude Oil. The Upstream industry is most exposed to geopolitical, regulatory pressures and changes in economic outlook. If Oil prices soar to high, demand could decrease dramatically, decreasing the volume part of the equation. If prices are to low, the price determinant of the equation can decrease revenue as well. Seasonal fluctuations can also occur as well. IT believed that during the summer months the demand for oil and gas decreases and increases in the winter colder months due to the need for heating.



Source: CFRA

Proven and Unproven Reserves - For the exploration and production industry, the amount of proven and unproven reserves is a primary determinant in if a upstream company can generate returns, A proven reserve is a measurement of the quantity of resources that can be obtained from a well owned by a firm. This is the primary input and driver of the total volume part of the equation. Without proved reserves there is no potential volume to be sold to buyers in the market. An Unproven reserve is a reserve that is owned by the firm but has not been explored or it has not be determined if there are viable sources of volume to be sold to a buyer. All reserves in the beginning start as unproven reserves but a primary operation of exploration and production firms is to determine the amount of unproven reserves can become proved reserves and provide economic benefit. Reserves also have three different classifications: 1P: Proven Reserves, 2P: Proven and Probable, 3P: Proven, Probable and Possible Reserves.

Revenue Outlook- According to a report released by CFRA Institute, exploration and production companies are expected in 2023 and 2024 to grow above 2019 levels by 6% and 10% . This is primarily driven by drilling and being able to capture demand more affectively due to expanded lateral depth for firms like Pioneer.

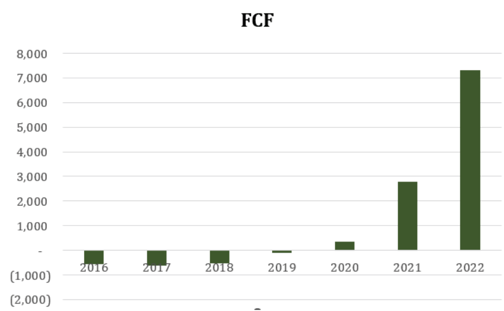


Source: CFRA

Capital Expenditure and Cash Flow Outlook - In FY2022, Pioneer and other exploration and production companies benefited from the higher commodities prices which lead to higher available cash flows. This allowed companies to have the opportunity to invest in their operations. However, due to the fixed nature of well operations for companies with established proven reserves like Pioneer, they were able to limit their capital expenditures and divert their cash into paying dividends back to shareholders and bolstering their balance sheet. Pioneer for example, has limited debt exposure so returns are able to be provided to shareholders or repurchase shares. This trend is common amongst the industry with 2022 being a record year for revenues and cash flows. CFRA projects that there will be a limited capital expenditure growth of 14.7% compared to 38.4% and 1.4% in 2024. It also expected that although revenue growth will decrease due to a drop off in record high average spot prices in 2022, however, exploration and production companies will have strong free cash flow figures higher than levels prior to the COVID-19 pandemic.

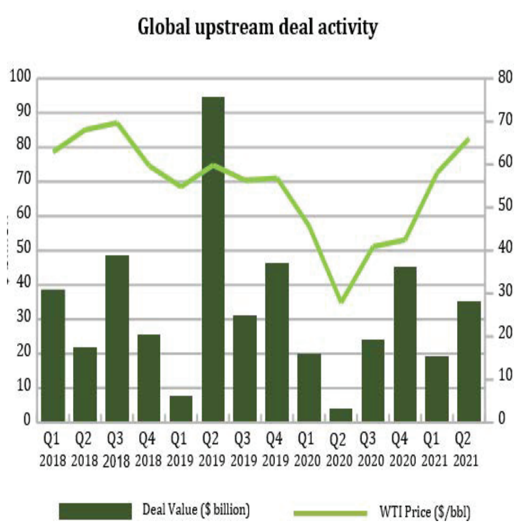
Development and Trends

We estimate that in 2023, the industry's top four players, EOG Resources, Occidental Petroleum, Pioneer Natural Resources, and Diamondback Energy will use their large cash balances and limited leverage exposure to engage in M&A activity. All these companies and the larger integrated oil companies (Exxon Mobil, Chevron, and Phillips 66) will want to grow their presence in the Permian Basin. This region is highly coveted due to its history of rapid oil production. Companies are steering away from longer investment horizons due to risk exposure for Oil demand in the future. We expect Pioneer can realize a strong return and maintain a competitive advantage due it dominates production and acreage. Pioneers strong cash balance and limited leverage risk can allow it to grow its position through acquisition or be a strong target for acquisition at a significant premium by an integrated oil firm.



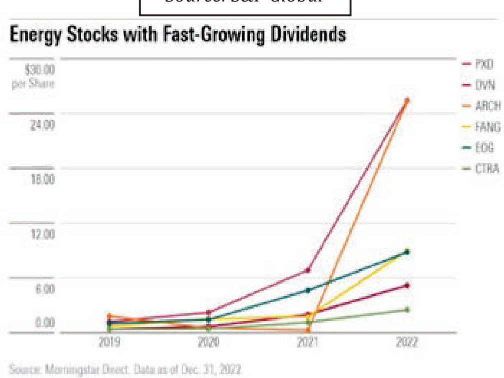
Recent Trends:

- **Strong cash flows leading to debt reduction** - In recent years, investor sentiment and societal pressures have led participants in the oil and gas industry to practice capital discipline. Regardless of operating free cash flows reaching historic highs for exploration and production companies, many companies plan to keep their capital budget programs unchanged going forward. Another trend we are seeing in the face of historically high cash flows from operations, is overall debt reduction among domestic E&P companies. Among the top twenty-five upstream oil and gas companies located in Northern America, "overall debt loads were decreased by $25 billion from 2021 to 2022 and is forecast to decrease by another $20 billion by 2027" (McKinsey). The oil and gas industry is known for being a boom-and-bust industry. Recent trends brought on by historically high cash flows show that firms are gearing their operations to be more conservative going forward, in the face of various external pressures.



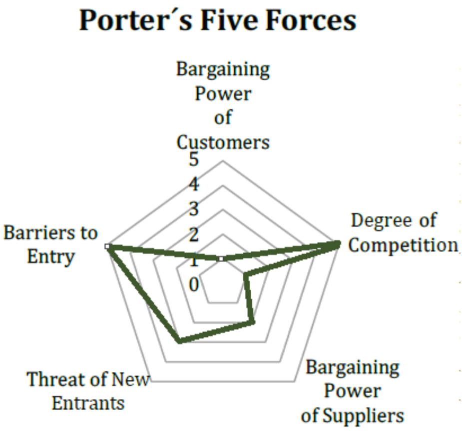
Source: S&P Global

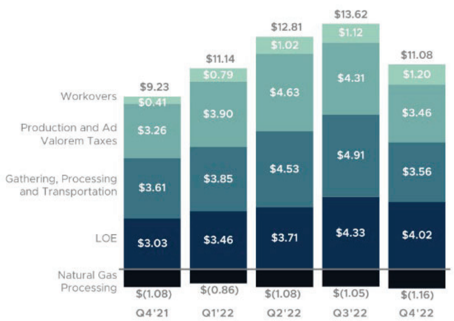
- **M&A environment leading to diversification -** As mentioned previously, exploration and production companies are sitting on large cash balances. According to a report released by analysts at McKinsey and Company, players within the upstream industry have an aggregate cash balance between $70 billion and $100 billion. Cash flows are still expected to be strong even with a hypothetical downturn of WTI Crude at $65/bbl.[2] While shale companies will also be looking for new reserves, legislative tailwinds supporting investment in renewable energy. Focal points of M&A activity in the industry last year were aimed towards energy security, improvement of ESG ratings, and consolidation with renewable energy sources. Due to oil and gas demand risk, and a combination of societal and environmental pressures, Oil and Gas companies are looking to invest in renewable energy. . Over the past 5 years, more than 70% of deals that have been executed throughout the energy chain have had the seller have a higher ESG score than the buyer. This ESG score can help provide incentives for these companies looking to invest in renewable energy. Incentives provided by recent legislation in various countries that encourages the implementation of renewable energy sources has also influenced M&A activity in the industry. In 2022, O&G companies spent about. $32 billion on clean energy companies, about 80% of this value was allocated towards biofuel, solar and wind assets.[5] In an analysis released by Deloitte, they stated that the current low-carbon capex share of global upstream companies could increase from the current 5%, to 30% by the year 2030.

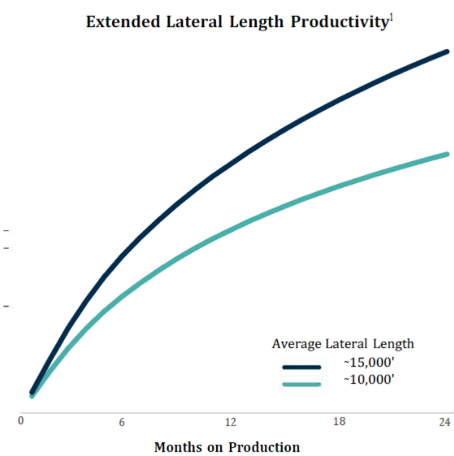


- **Large dividend payouts and share repurchases -** In FY2022, we saw a substantial portion of cash flows generated by the exploration and production industry be allocated towards providing historic dividends to shareholders and pursuing large share repurchase programs. Diamondback Energy, EOG Resources, and Pioneer have all raised their dividend over 370%, with Pioneer raising it by 2,000%. Exploration and production companies have introduced a new type of dividend: the variable dividend. This allows companies to issue a higher dividend when demand is significantly higher and decrease that payout when the company is more strapped for cash. These increases in dividend payouts is due to the uncertainty of returns long term drilling projects have when renewable energy sources pose a more significant risk then they currently do.

Porter's Five Forces







Source: Pioneer Q4

Degree of Competition - High: More specifically in the exploration and production industry, the biggest competitive advantage that a company can achieve is by gaining access to the most commodity-dense land. Being able to attain both the land, and its respective drilling rights can help reduce a company's production cost per barrel of oil and in turn, realize a higher profit margin per barrel sold. This is vital for a company's success in the industry since commodity prices tend to be cyclical and unpredictable at times. Another competitive factor for exploration and production companies is how well they can implement the newest drilling technology into their operations. Over recent years, technology that has been implemented into their operations includes "diverting agents, coil-tipping fracks, digitalization, and unconventional drilling." These technologies have increased speed and efficiency of the extraction process, causing there to be an average of 42% price decrease in the cost to drill a well in the past two years. If a company is unable to fund or implement the newest technologies in a timely manner, they will be losing out on profit margins which would otherwise give them the resources to drive production growth.

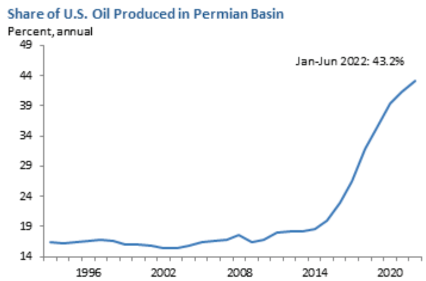
Threat of New Entrants - Low: The oil and gas industry have significant barriers to entry that are due to legislative hurdles and the capital-intensive nature of operations. The cost to acquire profitable land, establish a drill with help from an oilfield service company, fund daily operations, and get a transportation contract for extracted products are all costly requirements a company. This is based on the preconception that oil prices allow an emerging company's operations to be profitable for the first few years of business. On the legislative side of the industry, there have been many pressures and regulations that oil and gas producers have had to face in recent years. These pressures include higher royalties on federal land (increased by 50% in 2022), as well as the proposal of higher tax rates on these companies while funding for energy substitutes has increased.

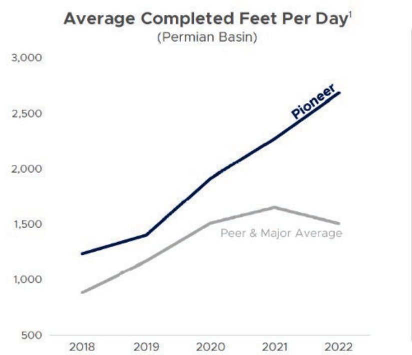
Bargaining Power of Suppliers - Low: The companies that are the suppliers to exploration and production firms are known as oil field service companies (OFS). These companies are independent contractors that assist with providing drill bits, helicopters for offshore drilling rig construction. These companies have limited power to negotiate better terms and conditions with upstream companies. Their business model is solely reliant on exploration and production companies for services. If E&Ps were to stop capital investment, these oil field service companies would struggle and would not be able to bargain. This leaves the suppliers subject to the decisions made by exploration and production companies. The primary supplier currently in the industry are Halliburton Company, Schlumberger NV, and Transocean LTD.

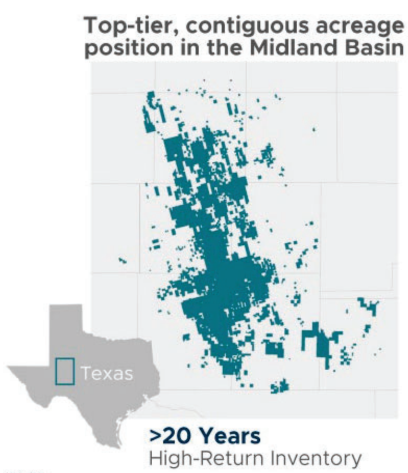
Bargaining Power of Customers – Moderate: The customers of upstream oil and gas companies' product include midstream companies, refineries, and distribution companies. These buyers are concerned with both the quality of oil, and the price for which they can buy it. The price of oil is dependent upon global benchmarks, so the bargaining power of the customer then lies upon which company operates in the geographical region that holds the type of product that they seek.

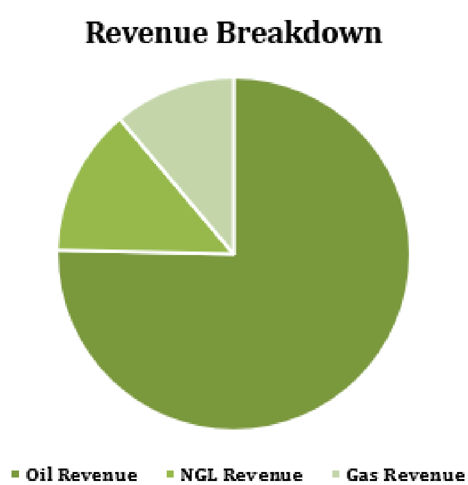
Threat of Substitutes – Moderate: Due to recent societal and legislative pressures, the oil and gas industry has been facing an increased risk from energy substitutes. Recent legislation that has promoted growth in the renewable energy industry has been the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA). The IIJA increases investment in EV's, electric grids, and clean energy technologies, while the IRA provides tax incentives and funding for clean vehicles and other clean energy. Some forms of renewable energy that will see government funding in the coming years include wind, solar, nuclear, and bio-fuel energy. These forms of energy creation are nothing new to society but will need more time and funding to be put in place on a global scale, and able to substitute the energy capabilities that the oil markets possess.

Company Overview and Outlook









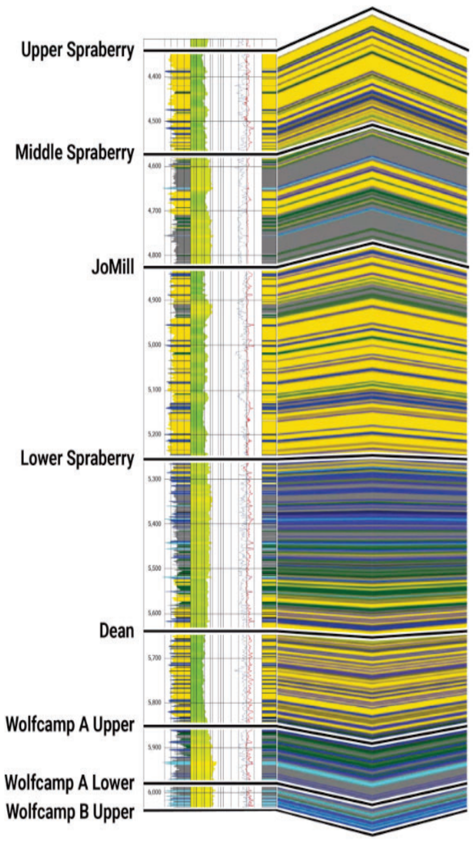
Company Overview: Pioneer Natural Resources operates as an independent oil and gas exploration and production company. Pioneer explores for and produces oil, natural gas liquids, and gas within the Permian Basin. Their operations take place solely within the Midland Sub-Basin, located in the heart of the Permian Basin which spans across western Texas. The Permian Basin is well-known for being a very profitable and prominent oil site in the United States, accounting for 40% of the oil that is produced domestically (Texas.gov). Pioneer Natural Resources is headquartered in Irving, Texas and is the largest producer in the Permian Basin. Pioneer operates completely within the upstream segment of the oil and gas industry and only sells their products to midstream oil and gas companies.

Financial Summary and Outlook: For the year ending 2022, Pioneer Natural Resources achieved a total revenue figure of $24.29 billion. This 65.9% increase from 2021's total revenue was due to a 35% increase in the average realized commodity prices per BOE caused by recovery in global demand paired with sanctions placed on Russian energy sources. Pioneer allowed itself to realize the full upside of commodity prices throughout 2022 since they disposed of commodity derivatives. The use of these derivatives are popular among upstream oil and gas companies, since they hedge commodity prices to protect against price volatility. In 2021, Pioneer held $2 billion worth of hedging instruments which decreased the revenue realized from oil sales by $13.96/Bbl. and decreased the revenue realized from gas sales by $0.99/Mcf. In 2022, Pioneer disposed of all oil derivatives and was exposed to all price volatility, which was the primary driver of top-line revenue growth (Page 52 of the 10-k). Total expenses for the year were $14.3 billion, an increase of 20.6% from 2021's total expenses. This is a result of expense recognition rules that the company must abide by when buying and selling purchased commodities to other oil and gas companies.
Although Pioneer paid slightly more in production taxes for 2022, they were able to achieve a net income of $7.85 billion, which is a 270.4% increase from the previous year. In 2022, elevated commodity prices drove bottom-line growth, resulting in a 270.4% increase in net income to $7.85 billion and earnings per share (EPS) figure of $32.61 for the period. We believe that Pioneer will have more steady financial performances. For FY2023 we forecast revenue to decrease by 2%. 2022 was a record year for commodity prices. Using guidance from the CME Henry Hub futures yield curve we see a decrease of 41.3% in the spot price compared to last year's price of $6.03. As of April 11th, 2023, the current WTI Crude Oil spot price is $81.60, as 14.7% reduction compared to 2022. In the equation mentioned previously (average market spot price x production volume) we projected significant decreases in the average market spot price Pioneer can capture for Oil, NGLs, and Natural Gas. With the average price per MBOE decreasing from $68.77 to $54.75.

Products, End Markets, and Customers: Pioneer Natural Resources provides three main commodities: Oil, Natural Gas Liquids (NGLs), and Natural Gas.

- **Oil:** Oil serves as the primary source of production revenue for Pioneer. In FY2022, Oil accounted for 75.3% of all production related revenue. We forecast that oil will account for 75.3-78% of production related revenue due to our expectation of higher production. We forecast Pioneer to grow oil production by 3.1% in 2023 and 7.5% in 2024. This is due to the expansion and growth of their 15,000' ft lateral drilling length program. This program is focused on improving currently operation wells that have a lateral length of 10,000' ft to 15,000' ft by increasing the depth of drilling from a typical drill, Pioneer is able to achieve much higher production and fully capture the economic value of their already vast number of proven wells.
- **Natural Gas Liquids (NGLs):** Natural Gas Liquids are a secondary biproduct of Pioneer's hydraulic fracturing (fracking). Production for NGLs by Pioneer saw rapid growth in with a 66.4% increase from the previous year in 2021. We forecast NGLs production to increase by 6.8% and 7.7% in 2023 and 2024. As Pioneer continues to expand its hydraulic fracturing operations, we expect production and revenue for NGLs to grow as well.
- **Natural Gas:** Natural Gas generates the least amount of production-related revenue for Pioneer. In FY2022, Natural Gas accounted for 11.1% of production-related revenue and we forecast that natural gas will continue to have a similar share of production-related revenue. We forecast the demand for natural gas to increase due to its application in the clean energy transition. Natural gas creates far less carbon emissions compared to crude oil so we expected that production for Pioneer will increase by 16.2% and 12.5% in 2023 and 2024. In 2022 we saw the average price per McF increase by 56.6% and 122.5% the year prior. We forecast that prices will stabilize and reach an average spot price of $3.54 and $4.20 in 2023 and 2024.

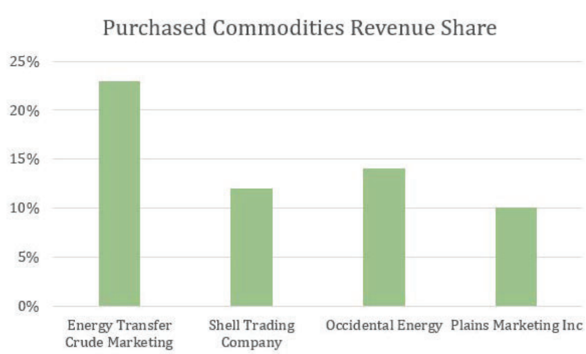
Company Overview and Outlook



Purchase of Commodities by Other Firms: Production-related revenue accounted for 66.9% of total revenue generated by Pioneer in 2022. Outside of its own production Pioneer has provided commitments of its Oil, Natural Gas Liquids, and Natural Gas to a variety of midstream and downstream. companies. Currently, Pioneer has outstanding contracts with Energy Transfer Crude Marketing LLC, Shell Trading US Company, Occidental Energy Marketing Inc., and Plains Marketing Inc. accounted for 23 percent, 14 percent, 12 percent, and 10 percent of the Company's oil, NGL and gas revenues, respectively. Occidental Petroleum was the only purchaser above 10% of the company's sales from commodities. The revenue generated by the contractual agreements with these four midstream companies severely impact the overall earnings of the firm as they make up 59% of the total revenue generated by Pioneer in 2022. If Pioneer can continue to maintain its competition advantage in the Permian, it will allow them secure future contractual agreements with more favorable terms. We project that purchased commodities by other firms' revenue will grow by 21.9% and 17.5% in 2023 and 2024.

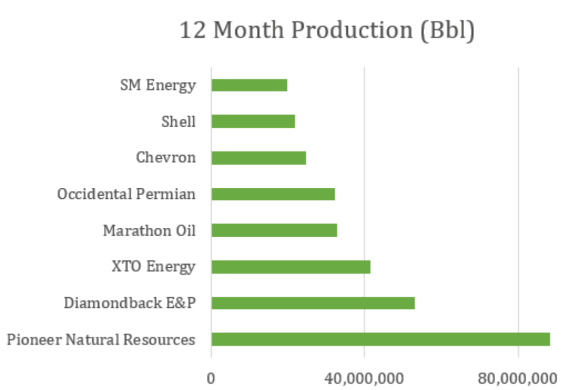
Production in the Permian: Pioneer exclusively operates in the Permian Basin. Pioneer is currently operating twenty-six rigs that have an average lateral length greater than 11,000' ft. With over 800,000+ net acres that are not subject to lease royalties, this allows Pioneer to create a strong inventory of efficient wells with horizontal drilling that allow Pioneer to achieve high margins. Pioneer currently has a 53$/BOE Hedged Cash Margin. Hedged Cash Margin is the profit after subtracting lease operating expenses (LOEs), general, processing, and transporting expenses (GP&Ts), production taxes, general and administrative and interest expense (per BOE). Amongst seven operators in the Permian Basin, Pioneer has the largest margin. In 2023 it is forecasted that pioneer will have 357 - 372 MBOPD (Thousand Barrel of Oil Per Day) and 670 - 700 MBOEPD (Thousand Barrel of Oil Equivalent Per Day) of production.

Production Costs: Pioneer has four main production related costs that are related to the production of Oil, Gas, and NGLs. Pioneer reported. $8.09 per BOE in production costs and forecasts $11.75-$13.25 for 2023



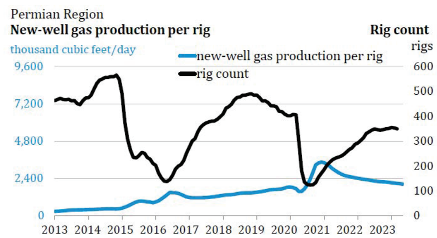
- Lease Operating Expenses (LOEs) - LOEs include expenses such as labor costs, equipment rentals, maintenance and repair costs, utilities, and supplies required to operate and maintain proven wells that are in production.
- Transportation Costs - Any cost related to transportation of product to be further processed or stored in inventory.
- Net Natural Gas - Pioneer incurs costs to process, treat, and market the natural gas. These costs include expenses for compression, dehydration, and processing the gas to meet transportation expectations (via pipeline).
- Workover Costs - Expenses related to the maintenance of existing wells.

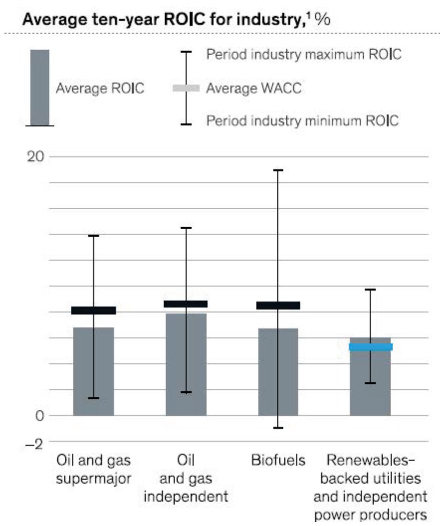
Competition: During the process of conducting relative valuation, we had identified these competitors to Pioneer:

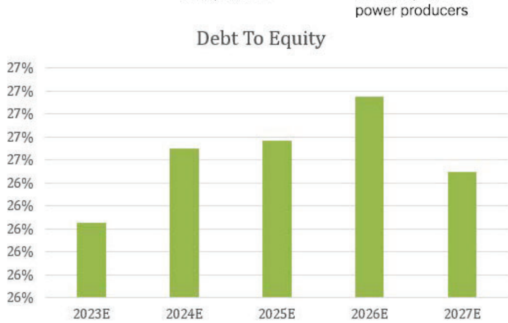


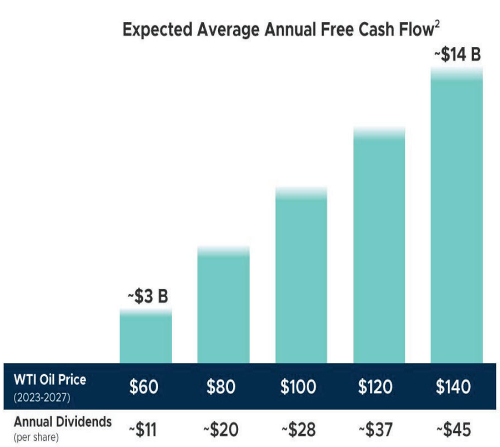
- EOG Resources is a oil and gas exploration and production company with a focus on shale plays in the Permian Basin
- Occidental Petroleum is a diversified energy company with operations in oil and gas production, chemicals, and midstream services.
- Diamondback Energy is a independent oil and gas company that operates in the Permian Basin.
- APA Corporation is a diversified energy company with operations in oil and gas production, exploration, and development, primarily in North America.
- Matador Resources is an independent energy company that focuses on oil and gas exploration and production in the United States, primarily in the Permian Basin and Eagle Ford Shale
- Permian Resources A is a subsidiary of Energy Transfer LP that focuses on oil and gas production in the Permian Basin and has a strong midstream infrastructure.
- SM Energy is an independent oil and gas exploration and production company with operations in the Permian Basin and Eagle Ford Shale.

SWOT Analysis









Strengths:

Defensive Positioning - Pioneer is currently the largest producer in the Permian Basin. With Pioneer being able to have control over the most rapid investment horizon available in the exploration and production sector allows Pioneer to develop a moat of protection from potential risk that other companies in the area may face. One of those risks is the risk of legislative pressures from the Department of Interior's increase in royalties on federal land to 15.87%. This severely impacts future investment and growth for companies that operate on federal land, but Pioneer has zero operations on federal land which allows them to save that 15.87% that its competitors may have to pay.

Mitigating Green Energy Transition Risk - Pioneer is taking steps to decrease its risk exposure to the green energy transition. NextEra is providing Pioneer with reliable and cost-effective renewable energy to power its operations in the Permian Basin, reducing Pioneer's carbon footprint and improving its sustainability profile.

Opportunities:

Artificial Intelligence - With the expansion of A.I technologies, Pioneer can utilize artificial intelligence and advanced mapping technology to help reduce exploration expenses and production costs, enabling the company to operate more efficiently and a higher quantity of proven wells.

Ability to Raise Capital - With substantial amounts of space to add more debt to the capital structure, Pioneer has the flexibility to fund growth initiatives and pursue M&A while maintaining financial discipline.

Weaknesses:

Fluctuations in Commodity Prices - Another challenge that Pioneer faces is the fluctuations of commodity prices. Pioneer's revenue and profitability are closely tied to the price of these commodities. Sudden drops in commodity prices can have a significant impact on Pioneer's financial performance, and the company may struggle to maintain profitability during periods of low prices and may not be able to pursue opportunities or provide returns to their investors.

Dependence of the Permian Basin - While the Permian Basin has significant potential for oil and gas production, some argue that Pioneer is too focused on this region and could benefit from diversifying its portfolio to reduce its exposure to regional geological risks. If Pioneer is unable to continue to find and develop high-quality reserves, its growth prospects could be limited.

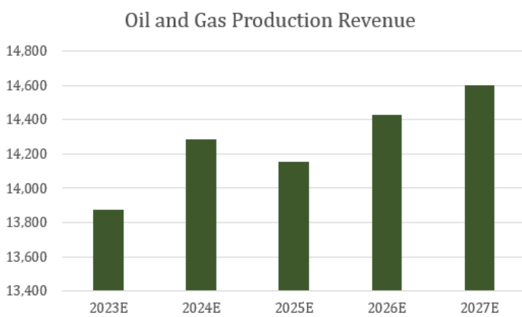
Threats:

Sustainable Fuels and Energy Sources - The Inflation Reduction Act has provided enormous amounts of subsidies and incentives through the form of carbon credits to businesses to invest and use renewable energy to power their operations. Pioneer serves a large amount of the energy need and produces large amounts of Oil, Natural Gas, and NGLs that are inputs for many businesses. If businesses are incentivized and compensated for transitioning to renewable energy. The Midstream purchasers outlined previously will not be purchasing oil from Pioneer if there is no demand for it.

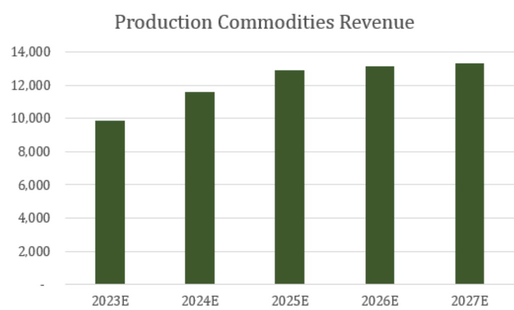
Valuation

We evaluated using multiple valuation models, including DCF, Economic Profit Model, Relative Valuation, Net Asset Value Model, and Dividend Discount Model. Based on these analyses, the company's price range is estimated to be between $211.39 and $235.57.

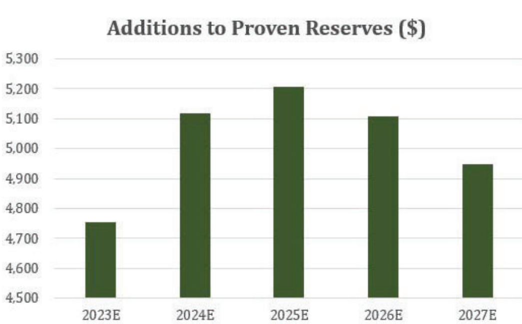
Production Revenue: Forecasting a company's revenue that depends upon market commodity prices can be variable and unpredictable, so we forecasted revenues using each commodity's future contract. For WTI oil, natural gas, and NGL's, we forecasted future prices based on the CME's forward futures curve for the entirety of our projection period. For 2023, we forecast Pioneer's production of oil, gas, and NGL's to grow by 3.1%, 6.8%, and 16.2% respectively. While production levels for these commodities are likely to increase based on the company's strong reserve replacement rate and capital deployment strategies, the CME futures curve for oil, natural gas, and NGL's show a decline of 14.7%, 22.8%, and 41.3% respectively. To determine the projected production volume for 2023, we first examined the management guidance from Pioneer Natural Resources' Q4 investor presentation, which provided insight into the company's expected production of 132,495 Mbbls. We then applied an average growth rate based on historical revenue growth percentages to estimate the expected increase in production volume for the following year.



Purchased Commodities Revenue: Our revenue from sales of purchased commodities was projected as a percentage of production revenue, based on historical averages. We then predicted that sales from purchased commodities as a percentage of production revenue will increase for 3 years until we straight line the amount from the 71.0% to 91.0% by 2025, since this line item has experienced much volatility in the past. Pioneer enters into pipeline agreements with midstream providers, which must be filled on a volume basis throughout each year. Their revenue from purchased commodities comes from their incentive to fill these contracts with the transportation companies. We see this stream of revenue increasing in line with Pioneer's production revenue growth going forward.



Oil and Gas Related Expenses and DD&A Expense: To determine our oil and gas related expense, we projected it as a % of an historical average of oil and gas sales. Historically we found this number to be very stable and straight lined our 8.44% figure. To forecast future Depletion, Depreciation, and Amortization, we used management guidance for 2023 on a per BOE basis. Due to the unpredictability of quality and depletion of unproven reserves that could be proven we straight lined this figure, and it grew as forecasted production increased.



Capital Expenditures: We looked to management guidance provided in the Q4 investor presentation to determine what investment in oil and properties would be for 2023. For further additions to Proven and Unproven reserves we identified that capex was historically 27.92% on average of sales. To determine additions to proven reserves and unproven reserves we allocated an average % of total capex to future proven reserves and unproven.

Debt: Debt is essential for companies operating within the upstream sector due to the capital-intensive nature of the industry. For Pioneer we forecasted total debt as a percentage of total assets based on historical averages. We are then straight-line debt as a percentage of total assets based on the company's historical average and assume that Pioneer will maintain a low level of debt going forward. Pioneer has limited exposure to credit and interest rate risk

Cost of Equity: We projected the cost of equity using the CAPM Model. At the time of this writing, the yield of the 10-year U.S. treasury is 3.59%. We found Pioneer's Beta to be 1.34, which was found by using linear regression over a 5-year window, on the company's returns compared to the S&P 500. The company's equity risk premium of 5.95% was sourced from Bloomberg datasets covering the oil and gas industry.

Weighted Average Cost of Capital: We calculated the weighted average cost of capital to be 11.13% for Pioneer. This was based on market value weights of debt and equity, of 9.11% and 90.89%, respectively. We predict that Pioneer will try to keep their debt levels lower than others in the industry going forward.

Relative P/E Model: We constructed a list of comparable companies based financial size, geographical regions, and end markets. Industry peers that operate mostly within the Permian Basin were the most comparable to Pioneer, but we mostly focused on exploration and production companies that operate in the Northern America. We found an industry-average price-to-earnings ratio of 7.01x and applied it to Pioneer's 2022 net income of $7,845. We then divided this figure by the company's shares outstanding at year-end of 2022. This resulted in an implied share price of $226.35.

Discount Cash Flow Analysis and Economic Profit Model: We performed a discounted cash flow analysis and economic profit analysis. We forecasted the free cash flow by projecting NOPLAT and subtracting projected capital expenditures. During our terminal year we used a CV Growth Rate of 2.5% and a Return on Invested Capital of 18.01%. After discounting the fiscal year free cash flow by the weighted average cost of capital to arrive at an enterprise value of $61.529 billion. After making our non-operating adjustments we arrived at an equity value of $56.647 billion divided by the shares outstanding of 243.0 resulting in an implied price of 232.52 as of today.

Net Asset Value Model: The primary valuation methodology for exploration and production companies is the net asset value model. In the net asset value model, we assume that Pioneer will not make any additional contributions to its reserves, and it produces at 100% capacity until the reserve is completely utilized. We used a well decline rate of 12% as that is the average decline rate estimated by The University of Michigan for E&P's operating in the Permian Basin.[1] We then projected out all production and development related expenses. We calculate our cash flows after production and development related expense and tax adjust said figure. Using an industry standard discount rate of 10% we calculate and sum our discounted cash flows. We then made non-operating adjustments like those made in the DCF and determine our Net Asset Value (Equity Value) divide by shares outstanding to arrive at an implied price of $235.64.

Industry-Specific Comparable Companies Analysis: The list of comparable companies is comprised of domestic-based E&P companies in the oil and gas sector.

- EV/EBITDAX - EBITDAX is proxy for free cash flow in the oil and gas industry with exploration expenses added back. Exploration expenses are added back to negate the effects of the two different accounting methods used in the industry: Full Cost and Successful Efforts, where exploration costs are either expensed or capitalized.
- EV/2P - This metric helps assess the market's perception of the company's future cash flow generating capacity and growth potential, since proved and probable reserves represent the estimated quantity of oil and gas that the company can commercially recover. Generally, a higher ratio implies that the market values the company's reserves more favorably.

DCF Model:	
Value of Operating Assets:	61,529
Non-Operating Adjustments	
Excess Cash	**2,593**
Marketable Securities	
Investments in Affilliate	**158**
Goodwill	**243**
Short Term Debt	**970**
Interest Payable	**104**
Short Term Derivatives	**288**
Long Term Debt	**5,576**
Long Term Derivatives	**-**
Short Term Operating Leases	**199**
Long Term Operating Leases	**362**
ESOP	**377**
Value of Equity	56,647
Shares Outstanding	243.0
Intrinsic Value of Last FYE	$ 233.16
Implied Price as of Today	$ 232.52

PV of Reserves Production	28,888	
PLUS: C&CE	1,032	
PLUS: A/R	1,853	
PLUS: Inventories	424	
PLUS: Total Net PP&E	31,288	
PLUS: MV of Net Acreage	1,307	
		$ 64,792
LESS: A/P	2637	
LESS: Repayment of Debt	4904	**$ 7,541**
Net Asset Value		**$ 57,251**
Shares Outstanding	242.95	
Implied Price	**$ 235.64**	

Industry-Specific Metrics

	EV/EBITDAX	EV/2P	EV/Production	P/FCF
PXD	4.5x	24.4x	244.5x	7.6x
EOG	4.0x	16.9x	215.5x	13.7x
OXY	4.2x	22.5x	199.1x	4.8x
FANG	4.2x	29.3x	234.3x	6.1x
MTDR	3.0x	19.7x	133.1x	6.4x
Average	4.0x	22.6x	205.3x	7.7x
Median	4.2x	22.5x	215.5x	6.4x

Average	$ 197.31	$ 207.34	$ 187.18	**$229.75**
Median	$ 209.06	$ 206.95	$ 197.08	$ 189.95

Sensitivity Analysis

CV Growth NOPLAT vs WACC: WACC has a large impact on the stock. As WACC increases, the value of the firm falls and as CV NOPLAT Growth increases the value of the firm increases

CV Growth NOPLAT (columns) / WACC (rows)

226.13	1.00%	1.50%	2.00%	2.50%	3.00%	3.50%	4.00%
8.67%	321.72	328.99	337.36	337.36	358.52	372.17	388.74
9.67%	279.77	284.41	289.65	289.65	302.51	310.50	319.89
10.67%	246.58	249.59	252.94	252.94	260.95	265.79	271.36
11.67%	246.58	249.59	252.94	252.94	260.95	265.79	271.36
12.67%	219.69	221.65	223.80	223.80	228.86	231.85	235.23
13.67%	178.83	179.63	180.50	180.50	182.48	183.61	184.86
14.67%	137.43	137.55	137.69	137.69	137.98	138.14	138.31

Risk Free Rate vs. Pre-Tax Cost of Debt: Increases in the risk free rate, increase both the cost of equity and the cost of debt, effectively increasing the firm's discount rate. The risk free rate will have a larger impact on the intrinsic stock price, since the pre-tax cost of debt will be tax effected and reduced from margins shown in the sensitivity tables.

Risk Free Rate (columns) / Pre Tax Cost of Debt (rows)

226.13	2.085%	2.585%	3.085%	3.585%	4.085%	4.585%	5.085%
7.30%	226.20	226.37	226.55	226.72	226.89	227.06	227.22
7.80%	226.01	226.18	226.35	226.52	226.69	226.86	227.03
8.30%	225.81	225.98	226.15	226.32	226.49	226.66	226.83
8.80%	225.61	225.78	225.96	226.13	226.30	226.46	226.63
9.30%	225.42	225.59	225.76	225.93	226.10	226.27	226.43
9.80%	225.22	225.39	225.56	225.73	225.90	226.07	226.24
10.30%	225.02	225.19	225.37	225.53	225.70	225.87	226.04

Normal Cash vs. Purchased Commodities as a % of Total Revenues: Increases in purchased commodities as a percentage of production revenues will decrease the intrinsic value of Pioneer, since there is an offsetting expense incurred with the purchased commodities. This decreases the firm's net income and cash flows as well.

Normal Cash (columns) / Purchased Commodities as % of Total Revenue (rows)

226.13	5.28%	5.78%	6.28%	6.78%	7.28%	7.78%	8.28%
26.51%	210.04	210.04	210.04	210.04	210.04	210.04	210.04
31.51%	216.97	216.97	216.97	216.97	216.97	216.97	216.97
36.51%	219.82	219.82	219.82	219.82	219.82	219.82	219.82
41.51%	218.60	218.60	218.60	218.60	218.60	218.60	218.60
46.51%	213.30	213.30	213.30	213.30	213.30	213.30	213.30
51.51%	203.92	203.92	203.92	203.92	203.92	203.92	203.92
56.51%	190.47	190.47	190.47	190.47	190.47	190.47	190.47

Beta (columns) / ERP (rows)

226.13	1.04	1.14	1.24	1.34	1.44	1.54	1.64
4.450%	224.61	224.79	224.96	225.13	225.30	225.47	225.64
4.950%	224.21	224.34	224.48	224.61	224.75	224.88	225.01
5.450%	224.00	224.12	224.23	224.35	224.47	224.58	224.70
5.950%	224.00	224.12	224.23	224.35	224.47	224.58	224.70
6.450%	224.21	224.34	224.48	224.61	224.75	224.88	225.01
6.950%	224.61	224.79	224.96	225.13	225.30	225.47	225.64
7.450%	225.22	225.45	225.67	225.90	226.13	226.35	226.57

Beta Vs. Equity Risk Premium: As ERP increases the value of Pioneer decreases and if the Beta where to increases the value of the firm as well will decrease.

CV EPS Growth vs Cost of Equity: As the Cost of Equity decreases the intrinsic value of the stock will increase and vice versa.

CV Growth of EPS (columns) / Cost of Equity (rows)

211.66	1.00	1.50	2.00	2.50%	3.00	3.50	4.00
10.65%	131.38	135.00	136.71	252.21	138.36	138.82	139.16
11.15%	128.65	132.12	133.75	237.12	135.32	135.75	136.08
11.65%	126.02	129.33	130.89	223.71	132.38	132.79	133.10
12.15%	123.47	126.64	128.12	211.72	129.54	129.93	130.22
12.65%	121.00	124.03	125.44	200.95	126.79	127.16	127.44
13.15%	118.60	121.50	122.85	191.21	124.13	124.49	124.75
13.65%	116.28	119.05	120.34	182.36	121.56	121.90	122.15

[1]Beeker, A. M. (2015). (Working paper). Net Asset Valuation of Whiting Petroleum's Acquisition of Kodiak Oil and Gas. Michigan Technological University

[2]Belanger, R., Brown, J., & Grace, T. (2023, February 24). Success in the M&A rebound: Riding the coming wave of upstream deals. McKinsey & Company. Retrieved April 18, 2023, https://www.mckinsey.com/industries/oil-and-gas/our-insights/success-in-the-m-and-a-rebound-riding-the-coming-wave-of-upstream-deals

[3]Bosoni, T. (2023, January 18). Oil Market Report. Paris; International Energy Association.

[4]Board of Governors of the Federal Reserve System. (2023, March 3). Monetary Policy Report.

[5]Brief history of OPEC. OPEC. (n.d.). Retrieved April 18, 2023, https://www.opec.org/opec_web/en/about_us/24.htm

[6]Chronis, A. (2022, October 24). 2023 Oil and Gas Industry Outlook. Deloitte.

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Pioneer Natural Resources (PXD)
Revenue Decomposition
$ values in millions

Fiscal Years Ending Dec. 31	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Total Revenue	3,824	5,455	9,415	9,325	6,686	14,643	24,294	23,714	25,845	27,033	27,551	27,876	28,228	28,541	28,689	28,984	29,416
check	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!
Production Revenues:																	
Oil																	
Total Volume (MBbls)	48,926	57,878	69,583	77,509	77,095	130,300	128,467	132,495	142,432	151,690	160,033	167,235	173,255	178,245	182,352	186,553	190,851
% growth		*18.3%*	*20.2%*	*11.4%*	*-0.5%*	*69.0%*	*-1.4%*	*3.1%*	*7.5%*	*6.5%*	*5.5%*	4.5%	3.6%	2.9%	2.3%	2.3%	2.3%
Average Price per Bbl	40.3	48.24	57.36	53.77	37.24	67.60	95.66	81.60	75.31	69.94	66.23	62.58	59.73	57.30	54.96	53.03	51.45
% growth		*19.7%*	*18.9%*	*-6.3%*	*-30.7%*	*81.5%*	*41.5%*	*-14.7%*	*-7.7%*	*-7.1%*	-9.8%	-9.8%	-9.8%	-9.8%	-9.8%	-9.8%	-9.8%
Total Oil Revenue	**1,972**	**2,792**	**3,991**	**4,168**	**2,871**	**8,808**	**12,289**	**10,812**	**10,727**	**10,609**	**10,599**	**10,466**	**10,349**	**10,213**	**10,022**	**9,893**	**9,819**
NGLs																	
Total Volume (MBbls)	15,922	20,078	23,280	26,398	31,376	52,205	58,507	62,500	67,375	69,400	73,478	77,797	82,369	87,209	91,309	95,602	100,097
% growth		*26.1%*	*15.9%*	*13.4%*	*18.9%*	*66.4%*	*12.1%*	*6.8%*	*7.8%*	*3.0%*	5.9%	5.9%	5.9%	5.9%	4.7%	4.7%	4.7%
Average Price per Bbl	13.4	19.31	29.84	19.33	15.62	32.7	37.67	29.1	28.2	28.57	28.94	29.31	29.70	30.08	30.47	30.87	31.27
% growth		*44.1%*	*54.5%*	*-35.2%*	*-19.2%*	*109.3%*	*15.2%*	*-22.8%*	*-3.1%*	*1.3%*	*1.3%*	*1.3%*	*1.3%*	*1.3%*	*1.3%*	*1.3%*	*1.3%*
Total NGLs Revenue	**213**	**388**	**695**	**510**	**490**	**1,707**	**2,204**	**1,819**	**1,900**	**1,983**	**2,126**	**2,281**	**2,446**	**2,623**	**2,782**	**2,951**	**3,130**
Gas																	
Total Volume (MMcf)	124,428	128,565	143,588	133,245	155,662	256,931	301,156	350,000	393,750	366,956	393,761	422,524	447,215	468,122	485,630	503,793	522,634
% growth		*3.3%*	*11.7%*	*-7.2%*	*16.8%*	*65.1%*	*17.2%*	*16.2%*	*12.5%*	*-6.8%*	*7.3%*	*7.3%*	*5.8%*	*4.7%*	*3.7%*	*3.7%*	*3.7%*
Average Price per Mcf	2.11	2.63	2.13	1.79	1.73	3.85	6.03	3.54	4.20	4.26	4.32	4.38	4.44	4.50	4.57	4.63	4.69
% growth		*24.6%*	*-19.0%*	*-16.0%*	*-3.4%*	*122.5%*	*56.6%*	*-41.3%*	*18.6%*	*1.40%*	*1.40%*	*1.40%*	*1.40%*	*1.40%*	*1.40%*	*1.40%*	*1.40%*
Total Gas Revenue	**263**	**338**	**306**	**239**	**269**	**989**	**1,816**	**1,239**	**1,654**	**1,563**	**1,700**	**1,850**	**1,986**	**2,108**	**2,217**	**2,332**	**2,453**
Total Production																	
Total Volume (MBOE)	85,586	99,401	116,794	126,114	134,415	225,326	237,167	253,328	275,432	282,250	299,138	315,452	330,160	343,475	354,599	366,121	378,054
% growth		*16.1%*	*17.5%*	*8.0%*	*6.6%*	*67.6%*	*5.3%*	*6.8%*	*12.5%*	*2.5%*	*6.0%*	*5.5%*	*4.7%*	*4.0%*	*3.2%*	*3.2%*	*3.3%*
Average Price per MBOE	28.25	35.39	42.73	38.98	27.01	51.05	68.77	54.75	51.85	50.15	48.22	46.27	44.77	43.51	42.36	41.45	40.74
% growth		*25.3%*	*20.7%*	*-8.8%*	*-30.7%*	*89.0%*	*34.7%*	*-20.4%*	*-5.3%*	*-3.3%*	*-3.8%*	*-4.1%*	*-3.3%*	*-2.8%*	*-2.6%*	*-2.1%*	*-1.7%*
Total Production Revenue	**2,418**	**3,518**	**4,991**	**4,916**	**3,631**	**11,503**	**16,310**	**13,869**	**14,280**	**14,155**	**14,426**	**14,596**	**14,780**	**14,944**	**15,022**	**15,176**	**15,402**
Sales and Purchased Commodities Revenue:																	
Total Revenue	1,533	1,776	4,388	4,755	3,394	6,367	8,074	9,845	11,565	12,878	13,125	13,280	13,447	13,597	13,667	13,808	14,013
% of Production Revenue	*63.4%*	*50.5%*	*87.9%*	*96.7%*	*93.5%*	*55.4%*	*49.5%*	71.0%	81.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%
% growth		*15.9%*	*147.1%*	*8.4%*	*-28.6%*	*87.6%*	*26.8%*	*21.9%*	*17.5%*	*11.4%*	*1.9%*	*1.2%*	*1.3%*	*1.1%*	*0.5%*	*1.0%*	*1.5%*
Interest and Other Income	32	53	38	76	-67	23	119										
% growth		*65.6%*	*-28.3%*	*100.0%*	*-188.2%*	*-134.3%*	*417.4%*										
Derivative Gain (Loss)	-161	-100	-292	55	-281	-2183	-315										
% growth		*-37.9%*	*192.0%*	*-118.8%*	*-610.9%*	*676.9%*	*-85.6%*										
Gain on Sale of Assets	2	208	290	(477)	9	(1,067)	106	0	0	0	0	0	0	0	0	0	0
% growth		*10300.0%*	*39.4%*	*-264.5%*	*-101.9%*	*-11955.6%*	*-109.9%*										

Pioneer Natural Resources (PXD)
Income Statement

Fiscal Years Ending Dec. 31	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Revenues:																	
Oil and Gas	2,418	3,518	4,991	4,916	3,631	11,503	16,310	13,869	14,280	14,155	14,426	14,596	14,780	14,944	15,022	15,176	15,402
Sales and Purchased Commodities	1,533	1,776	4,388	4,755	3,394	6,367	8,074	9,845	11,565	12,878	13,125	13,280	13,447	13,597	13,667	13,808	14,013
Deferred Compensation Plan Income	-	-	-	15	7	10	-	-	-	-	-	-	-	-	-	-	-
Interest Income				17	5	1	-	-	-	-	-	-	-	-	-	-	-
Other Income				44	(79)	12	-	-	-	-	-	-	-	-	-	-	-
Total Interest and Other Income (Loss)	32	53	38	76	(67)	23	119	-	-	-	-	-	-	-	-	-	-
Derivative Gain (Loss)	(161)	(100)	(292)	34	(281)	(2,183)	(315)										
Gain on Sale of Assets	2	208	290	(477)	9	(1,067)	106										
Total Revenues & Other Income	**3,824**	**5,455**	**9,415**	**9,325**	**6,686**	**14,643**	**24,294**	**23,714**	**25,845**	**27,033**	**27,551**	**27,876**	**28,228**	**28,541**	**28,689**	**28,984**	**29,416**
Expenses:																	
Oil and Gas Production	581	591	855	874	682	1,267	1,922	2,003	2,183	2,283	2,327	2,354	2,384	2,410	2,423	2,448	2,484
Production and Ad Valorem Taxes	136	215	284	299	242	651	965	861	938	982	1,000	1,012	1,025	1,036	1,042	1,052	1,068
Depletion, Depreciation, and Amortization	1,480	1,400	1,534	1,711	1,639	2,498	2,530	2,866	3,116	3,193	3,384	3,569	3,735	3,886	4,012	4,142	4,277
Purchased Commodities	1,597	1,807	3,930	4,472	3,633	6,560	8,235	8,339	9,088	9,506	9,688	9,803	9,926	10,036	10,088	10,192	10,344
Impairment Expenses	32	285	77	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exploration and Abandonments	119	106	114	58	47	51	41	77	71	65	59	59	60	62	64	63	62
Selling, General and Administrative	325	326	381	324	244	292	334	318	317	316	306	304	312	315	313	312	311
Accretion Expense	18	19	14	10	9	7	15	50	54	57	58	58	59	60	60	61	62
Interest Expense	207	153	126	121	129	161	128	432	575	625	677	727	774	817	861	904	945
Other Expense	288	244	849	448	321	410	173	169	184	193	196	199	201	203	204	206	209
Total Expenses	**4,783**	**5,146**	**8,164**	**8,317**	**6,946**	**11,897**	**14,343**	**15,113**	**16,526**	**17,219**	**17,695**	**18,084**	**18,477**	**18,826**	**19,066**	**19,380**	**19,762**
EBT (Pretax Income)	**(959)**	**309**	**1,251**	1,008	(260)	2,746	9,951	8,601	9,319	9,813	9,856	9,792	9,750	9,715	9,622	9,604	9,653
Income Tax Expense	(403)	(524)	276	231	(61)	628	2106	1,934	2,096	2,207	2,216	2,202	2,193	2,185	2,164	2,160	2,171
Effective Tax Rate	42.0%	-169.7%	22.1%	22.9%	23.4%	22.9%	21.2%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%
Net Income	**(556)**	**833**	**975**	**777**	**(199)**	**2,118**	**7,845**	**6,667**	**7,223**	**7,606**	**7,640**	**7,590**	**7,558**	**7,530**	**7,458**	**7,444**	**7,482**
Basic Weighted Average Shares Outstanding	166	170	171	167	165	233	240	243	245	246	248	250	252	253	255	257	259
Basic EPS	(3.34)	4.86	5.71	4.50	(1.21)	9.06	32.61	27.44	29.52	30.87	30.79	30.38	30.04	29.72	29.23	28.96	28.91

Pioneer Natural Resources (PXD)
Balance Sheet

Fiscal Years Ending Dec. 31	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Assets																	
Current Assets:																	
Cash and Cash Equivalents	1,118	896	825	631	1,442	3,847	1,032	3,465	4,555	5,852	7,450	9,143	10,885	12,972	15,432	17,999	20,769
Restricted Cash				74	59	37	-	-	-	-	-	-	-	-	-	-	-
Accounts Recievable (Net)	518	644	814	1,035	695	1,685	1,853	2,648	2,886	3,019	3,077	3,113	3,152	3,187	3,204	3,237	3,285
Income taxes receivable	3	7	7	7			164	-	-	-	-	-	-	-	-	-	-
Derivatives	14	11	52	32				-	-	-	-	-	-	-	-	-	-
Inventories	181	212	242	205	224	369	424	445	458	454	463	469	474	480	482	487	494
Investments in Affilate	-	-	172	187	123	135	172	158	158	158	158	158	158	158	158	158	158
Short Term Investments	1,441	1,213	443	-	-	58	-	-	-		-	-	-	-	-	-	-
Other		24	25	20	52	42	81	46	47	47	48	48	49	49	50	50	51
Total Current Assets	**3,275**	**3,007**	**2,580**	**2,191**	**2,595**	**6,173**	**3,726**	**6,762**	**8,104**	**9,530**	**11,195**	**12,930**	**14,718**	**16,846**	**19,325**	**21,931**	**24,757**
Proved Properties	18,566	20,404	21,165	22,444	23,934	34,454	38,465	42,653	47,161	51,749	56,249	60,609	64,833	68,910	72,798	76,531	80,138
Unproved Properties	486	558	601	584	576	6,063	6,008	6,572	7,180	7,798	8,404	8,992	9,561	10,110	10,634	11,137	11,623
Accumulated DD&A	(8,211)	(9,196)	(8,218)	(8,583)	(10,071)	(12,335)	(14,843)	(17,709)	(20,825)	(24,018)	(27,402)	(30,971)	(34,706)	(38,592)	(42,604)	(46,746)	(51,023)
Total Net Oil and Gas PP&E	10,841	11,766	13,548	14,445	14,439	28,182	29,630	31,516	33,516	35,529	37,250	38,629	39,688	40,428	40,828	40,922	40,738
Other property and equipment, net	1,529	1,762	1,291	1,632	1,584	1,694	1,658	1,870	2,100	2,341	2,587	2,836	3,088	3,343	3,599	3,857	4,120
Operating lease right of use assets				280	197	348	340	577	591	574	568	621	614	613	617	630	636
Goodwill	272	270	264	261	261	243	243	243	243	243	243	243	243	243	243	243	243
Other Assets	99	198	220	258	153	171	143	584	637	666	679	687	695	703	707	714	725
Long-Term Investments	420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Assets	**$ 16,436**	**$ 17,003**	**$ 17,903**	**$ 19,067**	**$ 19,229**	**$ 36,811**	**$ 35,740**	**$ 41,551**	**$ 45,191**	**$ 48,884**	**$ 52,522**	**$ 55,945**	**$ 59,046**	**$ 62,175**	**$ 65,319**	**$ 68,297**	**$ 71,219**
Liabilities																	
Accounts Payable:																	
Trade	741	1,174	1,441	1,221	928	2,380	2,487	**2,619**	**2,848**	**3,081**	**3,310**	**3,526**	**3,721**	**3,918**	**4,117**	**4,304**	**4,488**
Due to Affiliates	134	108	183	190	102	179	150	378	411	444	478	509	537	565	594	621	647
Interest Payable	68	59	53	53	35	53	33	104	103	103	104	104	110	120	135	137	141
Income Tax Payable	-	-	2	3	4	45	63	-	-	-	-	-	-	-	-	-	-
Short term portion of long term debt	485	449	-	450	140	244	779	968	1,053	1,139	1,224	1,303	1,376	1,449	1,522	1,591	1,659
Derivatives	77	232	27	12	234	538	44	288	327	310	369	444	433	391	458	480	498
Operating Leases				136	100	121	125	199	216	234	251	267	282	297	312	326	340
Other	61	106	112	431	363	513	206	459	500	540	581	618	653	687	722	755	787
Total Current Liabilities	**1,566**	**2,128**	**1,818**	**2,496**	**1,906**	**4,073**	**3,887**	**5,014**	**5,457**	**5,850**	**6,315**	**6,772**	**7,112**	**7,428**	**7,860**	**8,215**	**8,561**
Long-Term Debt	2,728	2,283	2,284	1,839	3,160	6,688	4,125	5,567	6,055	6,549	7,037	7,495	7,911	8,330	8,751	9,150	9,542
Derivatives	7	23	-	8	66	25	96	-	-	-	-	-	-	-	-	-	-
Deferred Income Taxes	1,397	899	1,152	1,389	1,366	2,038	3,867	4,496	4,890	5,289	5,683	6,053	6,389	6,727	7,067	7,390	7,706
Operating Leases				170	110	243	236	362	375	379	368	398	396	398	399	407	411
Other Liabilities	350	391	538	1,046	1,052	907	988	1,402	1,605	1,824	2,014	2,013	1,967	2,148	2,321	2,445	2,552
Total Liabilties	**$ 6,048**	**$ 5,724**	**$ 5,792**	**$ 6,948**	**$ 7,660**	**$ 13,974**	**$ 13,199**	**$ 16,841**	**$ 18,382**	**$ 19,891**	**$ 21,418**	**$ 22,732**	**$ 23,775**	**$ 25,031**	**$ 26,399**	**$ 27,607**	**$ 28,772**
Equity																	
Contributed Capital																	
Common Stock	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Additional Paid in Capital	8,892	8,974	9,062	9,161	9,323	19,123	18,779	18,779	18,780	18,780	18,780	18,781	18,781	18,781	18,781	18,782	18,782
Treasury Stock	(218)	(249)	(423)	(1,069)	(1,234)	(248)	(1,925)	(1,871)	(2,068)	(2,270)	(2,467)	(2,658)	(2,843)	(3,022)	(3,193)	(3,356)	(3,515)
Retained Earnings	1,728	2,547	3,470	4,025	3,478	3,960	5,685	7,800	10,096	12,480	14,789	17,089	19,332	21,383	23,330	25,264	27,177
Noncontrolling interest in consolidated subsidiaries	7	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Equity	**$ 10,411**	**$ 11,279**	**$ 12,111**	**$ 12,119**	**$ 11,569**	**$ 22,837**	**$ 22,541**	**$ 24,711**	**$ 26,810**	**$ 28,992**	**$ 31,105**	**$ 33,213**	**$ 35,271**	**$ 37,144**	**$ 38,920**	**$ 40,691**	**$ 42,447**
Total Liabilities and Equity	**$ 16,459**	**$ 17,003**	**$ 17,903**	**$ 19,067**	**$ 19,229**	**$ 36,811**	**$ 35,740**	**$ 41,551**	**$ 45,191**	**$ 48,884**	**$ 52,522**	**$ 55,945**	**$ 59,046**	**$ 62,175**	**$ 65,319**	**$ 68,297**	**$ 71,219**

Pioneer Natural Resources (PXD)
Forecasted Cash Flow Statement

Fiscal Years Ending Dec. 31	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Cash Flow from Operating Activities										
Net Income	6,667	7,223	7,606	7,640	7,590	7,558	7,530	7,458	7,444	7,482
Adjustments to Reconcile Net Income to Cash Provided by Operating Activties:										
Depletion, Depreciation and Amoritization	2,866	3,116	3,193	3,384	3,569	3,735	3,886	4,012	4,142	4,277
Changes in Operating Assets and Liabilities:										
Accounts Receivable	(795)	(238)	(133)	(58)	(36)	(39)	(35)	(16)	(33)	(48)
Investments in Affilates	14	-	-	-	-	-	-	-	-	-
Income Tax Recievable	164	-	-	-	-	-	-	-	-	-
Inventories	(21)	(13)	4	(9)	(5)	(6)	(5)	(2)	(5)	(7)
Restricted Cash	-	-	-	-	-	-	-	-	-	-
Lease Asset	(237)	(15)	17	6	(53)	7	1	(5)	(13)	(6)
Other Assets (current)	35	(1)	0	(1)	(1)	(1)	(1)	(0)	(1)	(1)
Other Assets (Long term)	(441)	(52)	(29)	(13)	(8)	(9)	(8)	(4)	(7)	(11)
Trade	132	229	233	229	216	195	197	198	188	184
Due to Affilates	228	33	34	33	31	28	28	29	27	27
Interest Payable	71	(1)	0	1	0	6	10	15	2	3
Income Taxes Payable	(63)	-	-	-	-	-	-	-	-	-
Deferred Tax Liabilties	629	394	400	394	370	335	339	340	322	316
Operating Lease Liabilites	199	31	22	7	46	13	16	16	22	18
Other Liabilties (current)	253	40	41	40	38	34	35	35	33	32
Other Liabilities (Long term)	414	203	219	190	(1)	(46)	181	173	123	107
Cash Flow Provided from Operating Activities	**10,115**	**10,948**	**11,606**	**11,845**	**11,757**	**11,811**	**12,175**	**12,249**	**12,245**	**12,375**
Cash Flow from Investing Activities										
Additions to Oil and Gas properties	(4,752)	(5,116)	(5,207)	(5,105)	(4,948)	(4,794)	(4,627)	(4,412)	(4,236)	(4,094)
Additions to other assets and other PP&E	(212)	(231)	(241)	(246)	(249)	(252)	(255)	(256)	(259)	(262)
Derivatives (short-term)	(96)	-	-	-	-	-	-	-	-	-
Derivatives (long-term)	244	40	(18)	59	75	(11)	(42)	67	22	18
Cash Outflows from Investing Activties	**(4,816)**	**(5,307)**	**(5,466)**	**(5,292)**	**(5,121)**	**(5,057)**	**(4,923)**	**(4,601)**	**(4,472)**	**(4,338)**
Cash Flows from Financing Activities										
Change in Common Stock Account	0	0	0	0	0	0	0	0	0	0
Change in Short Term Debt	189	85	86	85	80	72	73	73	69	68
Change in Long Term Debt	1,442	488	495	487	459	415	419	421	399	391
Dividend Payment	(4,552)	(4,927)	(5,223)	(5,330)	(5,291)	(5,315)	(5,479)	(5,512)	(5,510)	(5,569)
Repurchase of Stock	54	(198)	(201)	(197)	(191)	(185)	(179)	(171)	(164)	(158)
Cash Outflows from Financing Actvities	(2,866)	(4,552)	(4,843)	(4,955)	(4,943)	(5,012)	(5,165)	(5,188)	(5,205)	(5,267)
Net Cash Increase/Decrease	2,433	1,090	1,298	1,598	1,692	1,742	2,087	2,461	2,567	2,770
Cash at Beginning	1,032	3,465	4,555	5,852	7,450	9,143	10,885	12,972	15,432	17,999
Cash at End	3,465	4,555	5,852	7,450	9,143	10,885	12,972	15,432	17,999	20,769

Pioneer Natural Resources (PXD)
Historical Cash Flow Statement

Fiscal Years Ending Dec. 31	2016	2017	2018	2019	2020	2021	2022
Cash Flows From Operating Activities							
Net Income	$ (556)	$ 833	$ 975	$ 777	$ (199)	$ 2,118	$ 7,845
Depletion, Depreciation and Amortization	1,480	1,400	1,534	1,711	1,639	2,498	2,530
Exploration Expense	42	22	27	8	11	4	7
Deferred Income Taxes	(379)	(519)	274	240	(52)	583	1,807
(Gain) Loss on Sale of Assets	(2)	(208)	(290)	477	(9)	1,067	(106)
Loss on early extinguishment of debt	-	-	-	-	27	2	39
Accretion of discount on asset retirement obligations	18	19	14	10	9	7	15
Interest Expense	13	5	5	5	34	10	10
Impairment of Oil and Gas	32	285	77				
Impairment of Inventory and Other PP&E	8	2	11				
Derivative-related Activity	851	174	(270)	(8)	325	(451)	**(96)**
Amortization of Stock-based compensation	89	79	85	100	72	106	**78**
Investment Valuation Adjustments				30	64	(1)	(54)
South Texas Deficiency Fee Obligation, Net				-	80	(10)	-
South Texas Contingent Consideration Valuation Adjustment					42		
Other	70	85	658	143	128	163	144
Working Capital:							
A/R	(141)	(120)	(52)	(227)	309	(607)	(171)
Income Taxes Receivable	40	(4)	-				(164)
Inventories	(32)	(35)	(70)	(20)	(20)	(125)	(59)
Derivatives	(24)	-	-				
Investments	(21)	(2)	4				
Other Current Assets	(3)	3	(1)	(33)	(40)	(73)	(113)
Operating Lease right-of-use assets				-	64	52	
AP	58	134	321	(7)	(179)	1,059	(274)
Operating Leases				-	(95)	(55)	
Interest Payable	3	(9)	(5)	-	(19)	(53)	(20)
Income Tax Payable					1	41	
Other Current Liabilities	(46)	(45)	(55)	(86)	(108)	(276)	(70)
Net Change in Working Capital							
Cash From Operating Activities	**$ 1,500**	**$ 2,099**	**$ 3,242**	**$ 3,120**	**$ 2,084**	**$ 6,059**	**$ 11,348**
Proceeds From Disposition of Assets	507	352	469	149	60	3,244	367
Cash used in acquisitions, net of cash acquired	(428)	-	-	-	-	(826)	-
Purchases of short-term investments, net	(2,741)	1,467	(669)				(1,020)
Proceeds from investments	905	(904)	1,373	624	-	-	1,100
Additions to oil and gas properties	(1,857)	(2,365)	(3,520)	(2,988)	(1,602)	(3,169)	(3,920)
Additions to other PP&E	(207)	(342)	(263)	(232)	(126)	(118)	(113)
Cash From Investing Activities	**$ (3,821)**	**$ (1,792)**	**$ (2,610)**	**$ (2,447)**	**$ (1,668)**	**$ (869)**	**$ (3,586)**
Proceeds from issuance of common stock, net of issuance costs	2,534						
Proceeds from issuance of senior notes, net of discount	(455)	(485)		-	1,091	3,247	-
Proceeds from issuance of convertible senior notes				-	1,323	-	-
Purchase of derivatives related to issuance of convertible senior notes				-	(113)	-	-
Borrowings under credit facility				-	800	650	-
Repayment of credit facilities				-	(800)	(1,287)	-
Repayment of senior notes, including tender offer premiums			(450)	-	(1,198)	(3,371)	(2,576)
Payments of other liabilities			(23)	(14)	(173)	(164)	
Proceeds from capped call on convertible notes					-	-	103
Payments of financing fees	-	-	(4)	-	(36)	(32)	(192)
Purchases of treasury stock	(25)	(36)	(179)	(653)	(176)	(269)	(1,687)
Exercise of long-term incentive plan stock options	7	6	8	6	9	13	7
Dividends paid	(13)	(14)	(55)	(127)	(346)	(1,594)	(6,269)
Cash From Financing Activities	**$ 2,048**	**$ (529)**	**$ (703)**	**$ (788)**	**$ 381**	**$ (2,807)**	**$ (10,614)**
Net change in cash, cash equivalents and restricted cash	$ (273)	$ (222)	$ (71)	$ (115)	$ 797	$ 2,383	$ (2,852)
Cash, cash equivalents and restricted cash, beginning of period				$825	$710	$1,506	$3,889
Cash, cash equivalents and restricted cash, end of period				$710	$1,506	$3,889	$1,037
FCF	(564)	(608)	(541)	(100)	356	2,772	7,315
% growth		8%	-11%	-82%	-455%	680%	164%

Pioneer Natural Resources (PXD)
Common Size Income Statement

Fiscal Years Ending Dec. 31	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Revenues:																	
Total Revenue	**3,824**	**5,455**	**9,415**	**9,325**	**6,686**	**14,643**	**24,294**	**23,714**	**25,845**	**27,033**	**27,551**	**27,876**	**28,228**	**28,541**	**28,689**	**28,984**	**29,416**
Oil and Gas	63.23%	64.49%	53.01%	52.72%	54.30%	78.56%	67.14%	58.49%	55.25%	52.36%	52.36%	52.36%	52.36%	52.36%	52.36%	52.36%	52.36%
Sales and Purchased Commodities	40.09%	32.56%	46.61%	50.99%	50.77%	43.48%	33.23%	41.51%	44.75%	47.64%	47.64%	47.64%	47.64%	47.64%	47.64%	47.64%	47.64%
Deferred Compensation Plan Income	0.00%	0.00%	0.00%	0.16%	0.10%	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Interest Income	0.00%	0.00%	0.00%	0.18%	0.07%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Income	0.00%	0.00%	0.00%	0.47%	-1.18%	0.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Interest and Other Income (Loss)	0.84%	0.97%	0.40%	0.82%	-1.00%	0.16%	0.49%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Derivative Gain (Loss)	-4.21%	-1.83%	-3.10%	0.36%	-4.20%	-14.91%	-1.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Gain on Sale of Assets	0.05%	3.81%	3.08%	-5.12%	0.13%	-7.29%	0.44%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Revenues & Other Income	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Expenses:																	
Oil and Gas Production	15.19%	10.83%	9.08%	9.37%	10.20%	8.65%	7.91%	8.44%	8.44%	8.44%	8.44%	8.44%	8.44%	8.44%	8.44%	8.44%	8.44%
Production and Ad Valorem Taxes	3.56%	3.94%	3.02%	3.21%	3.62%	4.45%	3.97%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%
Depletion, Depreciation, and Amortization	38.70%	25.67%	16.29%	18.35%	24.52%	17.06%	3.97%	12.09%	12.06%	11.81%	12.28%	12.80%	13.23%	13.61%	13.98%	14.29%	14.54%
Purchased Commodities	41.76%	33.13%	41.74%	47.96%	54.34%	44.80%	3.97%	35.16%	35.16%	35.16%	35.16%	35.16%	35.16%	35.16%	35.16%	35.16%	35.16%
Impairment Expenses	0.84%	5.22%	0.82%	0.00%	0.00%	0.00%	10.41%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Exploration and Abandonments	3.11%	1.94%	1.21%	0.62%	0.70%	0.35%	33.90%	0.32%	0.27%	0.24%	0.21%	0.21%	0.21%	0.22%	0.22%	0.22%	0.21%
Selling, General and Administrative	8.50%	5.98%	4.05%	3.47%	3.65%	1.99%	1.37%	1.34%	1.23%	1.17%	1.11%	1.09%	1.11%	1.10%	1.09%	1.08%	1.06%
Accretion Expense	0.47%	0.35%	0.15%	0.11%	0.13%	0.05%	0.00%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%
Interest Expense	5.41%	2.80%	1.34%	1.30%	1.93%	1.10%	0.17%	1.82%	2.23%	2.31%	2.46%	2.61%	2.74%	2.86%	3.00%	3.12%	3.21%
Other Expense	7.53%	4.47%	9.02%	4.80%	4.80%	2.80%	1.37%	0.71%	0.71%	0.71%	0.71%	0.71%	0.71%	0.71%	0.71%	0.71%	0.71%
Total Expenses	125.08%	94.34%	86.72%	89.19%	103.90%	81.25%	67.06%	63.73%	63.94%	63.70%	64.23%	64.87%	65.46%	65.96%	66.46%	66.86%	67.18%
EBT (Pretax Income)	-25.08%	5.66%	13.28%	10.81%	-3.90%	18.75%	40.96%	**36.27%**	**36.06%**	**36.30%**	**35.77%**	**35.13%**	**34.54%**	**34.04%**	**33.54%**	**33.14%**	**32.82%**
Income Tax Expense	-10.54%	-9.61%	2.93%	2.48%	-0.91%	4.29%	8.67%	**8.16%**	**8.11%**	**8.16%**	**8.05%**	**7.90%**	**7.77%**	**7.65%**	**7.54%**	**7.45%**	**7.38%**
Net Income	0.01%	-0.03%	0.00%	8.33%	-2.98%	14.46%	32.29%	**28.11%**	**27.95%**	**28.14%**	**27.73%**	**27.23%**	**26.77%**	**26.38%**	**26.00%**	**25.68%**	**25.44%**

Pioneer Natural Resources (PXD)
Common Size Balance Sheet

Fiscal Years Ending Dec. 31	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**	**2029E**	**2030E**	**2031E**	**2032E**
Assets																	
Current Assets:																	
Cash and Cash Equivalents	29.24%	16.43%	8.76%	6.77%	21.57%	26.27%	7.05%	23.66%	31.11%	39.97%	50.88%	62.44%	74.33%	88.59%	105.39%	122.92%	141.84%
Restricted Cash	0.00%	0.00%	0.00%	0.79%	0.88%	0.25%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Accounts Recievable (Net)	13.55%	11.81%	8.65%	11.10%	10.40%	11.51%	12.65%	18.08%	19.71%	20.62%	21.01%	21.26%	21.53%	21.77%	21.88%	22.10%	22.43%
Income taxes receivable	0.08%	0.13%	0.07%	0.08%	0.00%	0.00%	1.12%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Derivatives	0.37%	0.20%	0.55%	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Inventories	4.73%	3.89%	2.57%	2.20%	3.35%	2.52%	2.90%	3.04%	3.13%	3.10%	3.16%	3.20%	3.24%	3.28%	3.29%	3.33%	3.38%
Investments in Affilate	0.00%	0.00%	1.83%	2.01%	1.84%	0.92%	1.17%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%
Short Term Investments	37.68%	22.24%	4.71%	0.00%	0.00%	0.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	0.00%	0.44%	0.27%	0.21%	0.78%	0.29%	0.55%	0.31%	0.32%	0.32%	0.33%	0.33%	0.33%	0.34%	0.34%	0.34%	0.35%
Total Current Assets	85.65%	55.13%	27.40%	23.50%	38.82%	42.16%	25.45%	46.18%	55.35%	65.08%	76.46%	88.30%	100.51%	115.04%	131.98%	149.77%	169.07%
Proved Properties	485.54%	374.06%	224.81%	240.69%	358.00%	235.30%	262.69%	291.29%	322.08%	353.41%	384.14%	413.91%	442.76%	470.61%	497.16%	522.65%	547.28%
Unproved Properties	12.71%	10.23%	6.38%	6.26%	8.62%	41.41%	41.03%	44.88%	49.03%	53.25%	57.39%	61.41%	65.29%	69.05%	72.62%	76.06%	79.38%
Accumulated DD&A	-214.73%	-168.59%	-87.29%	-92.04%	-150.64%	-84.24%	-101.37%	-120.94%	-142.22%	-164.03%	-187.14%	-211.51%	-237.02%	-263.56%	-290.95%	-319.24%	-348.45%
Total Net Oil and Gas PP&E	283.51%	215.70%	143.90%	154.91%	215.97%	192.46%	202.35%	215.23%	228.89%	242.64%	254.39%	263.81%	271.04%	276.09%	278.83%	279.47%	278.21%
Other property and equipment, net	39.99%	32.30%	13.71%	17.50%	23.69%	11.57%	23.13%	23.13%	23.13%	23.13%	23.13%	23.13%	23.13%	23.13%	23.13%	23.13%	23.13%
Operating lease right of use assets	0.00%	0.00%	0.00%	3.00%	2.95%	2.38%	2.78%	2.78%	2.78%	2.78%	2.78%	2.78%	2.78%	2.78%	2.78%	2.78%	2.78%
Goodwill	7.11%	4.95%	2.80%	2.80%	3.90%	1.66%	1.66%	1.66%	1.66%	1.66%	1.66%	1.66%	1.66%	1.66%	1.66%	1.66%	1.66%
Other Assets	2.59%	3.63%	2.34%	2.77%	2.29%	1.17%	0.98%	3.99%	4.35%	4.55%	4.63%	4.69%	4.75%	4.80%	4.83%	4.88%	4.95%
Total Assets	429.83%	311.71%	190.16%	204.47%	287.62%	251.39%	244.08%	283.76%	308.62%	333.84%	358.69%	382.07%	403.24%	424.61%	446.08%	466.42%	486.37%
Liabilities and Equity																	
Current Liabilties:																	
Accounts Payable:																	
Trade	19.38%	21.52%	15.31%	13.09%	13.88%	16.25%	16.98%	10.78%	12.01%	11.92%	12.24%	12.80%	13.35%	13.88%	14.42%	15.00%	15.49%
Due to Affiliates	3.50%	1.98%	1.94%	2.04%	1.53%	1.22%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%
Interest Payable	1.78%	1.08%	0.56%	0.57%	0.52%	0.36%	0.57%	0.57%	0.57%	0.57%	0.57%	0.57%	0.57%	0.57%	0.57%	0.57%	0.57%
Income Tax Payable	0.00%	0.00%	0.02%	0.03%	0.06%	0.31%	0.43%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Short term portion of long term debt	12.68%	8.23%	0.00%	4.83%	2.09%	1.67%	5.32%	3.98%	4.44%	4.41%	4.53%	4.73%	4.93%	5.13%	5.33%	5.55%	5.72%
Derivatives	2.01%	4.25%	0.29%	0.13%	3.50%	3.67%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%
Operating Leases	0.00%	0.00%	0.00%	1.46%	1.50%	0.83%	0.85%	0.82%	0.91%	0.90%	0.93%	0.97%	1.01%	1.05%	1.09%	1.14%	1.17%
Other	1.60%	1.94%	1.19%	4.62%	5.43%	3.50%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%
Total Current Liabilities	40.95%	39.01%	19.31%	26.77%	28.51%	27.82%	26.55%	34.24%	37.27%	39.95%	43.13%	46.25%	48.57%	50.73%	53.68%	56.10%	58.47%
Long-Term Debt	71.34%	41.85%	24.26%	19.72%	47.27%	45.67%	28.17%	22.92%	25.53%	25.34%	26.03%	27.21%	28.38%	29.51%	30.66%	31.90%	32.92%
Derivatives	0.18%	0.42%	0.00%	0.09%	0.99%	0.17%	0.66%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Deferred Income Taxes	36.53%	16.48%	12.24%	14.90%	20.43%	13.92%	26.41%	18.51%	20.62%	20.46%	21.02%	21.97%	22.92%	23.83%	24.76%	25.76%	26.59%
Operating Leases	0.00%	0.00%	0.00%	1.82%	1.65%	1.66%	1.61%	1.49%	1.58%	1.47%	1.36%	1.45%	1.42%	1.41%	1.40%	1.42%	1.42%
Other Liabilities	9.15%	7.17%	5.71%	11.22%	15.74%	6.19%	6.75%	9.57%	6.61%	7.69%	7.79%	7.45%	7.14%	7.71%	8.22%	8.57%	8.90%
Total Liabilties	158.17%	104.94%	61.52%	74.51%	114.58%	95.43%	90.14%	115.01%	75.66%	83.88%	82.87%	84.09%	86.29%	89.79%	93.52%	96.72%	100.29%
Equity:																	
Contributed Capital	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Common Stock	0.05%	0.04%	0.02%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
Additional Paid in Capital	232.54%	164.52%	96.25%	98.24%	139.45%	130.60%	128.25%	77.30%	79.19%	72.66%	69.47%	68.17%	67.37%	66.53%	65.80%	65.47%	64.80%
Treasury Stock	-5.70%	-4.56%	-4.49%	-11.46%	-18.46%	-1.69%	-13.15%	-7.70%	-8.72%	-8.78%	-9.13%	-9.65%	-10.20%	-10.71%	-11.19%	-11.70%	-12.13%
Retained Earnings	45.19%	46.69%	36.86%	43.16%	52.02%	27.04%	38.82%	32.11%	42.58%	48.29%	54.71%	62.03%	69.35%	75.75%	81.74%	88.06%	93.77%
Total Equity	272.27%	206.77%	222.02%	222.17%	212.09%	418.66%	413.23%	453.01%	491.49%	531.50%	570.23%	608.89%	646.61%	680.95%	713.51%	745.96%	778.15%
Total Liabilities and Equity	430.44%	311.71%	190.16%	204.47%	287.62%	251.39%	147.11%	175.22%	174.86%	180.83%	190.64%	200.69%	209.18%	217.84%	227.68%	235.64%	242.11%

Pioneer Natural Resources (PXD)
Value Driver Estimation

Fiscal Years Ending Dec. 31	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
NOPLAT:																	
Operating Revenue																	
Sale of Oil and Gas	2,418	3,518	4,991	4,916	3,631	11,503	16,310	13,869	14,280	14,155	14,426	14,596	14,780	14,944	15,022	15,176	15,402
Sale of Purchased Commodities	1,533	1,776	4,388	4,755	3,394	6,367	8,074	9,845	11,565	12,878	13,125	13,280	13,447	13,597	13,667	13,808	14,013
Total Operating Revenue	**3,951**	**5,294**	**9,379**	**9,671**	**7,025**	**17,870**	**24,384**	**23,714**	**25,845**	**27,033**	**27,551**	**27,876**	**28,228**	**28,541**	**28,689**	**28,984**	**29,416**
Operating Expense																	
Oil and Gas Production	581	591	855	874	682	1,267	1,922	2,003	2,183	2,283	2,327	2,354	2,384	2,410	2,423	2,448	2,484
Production and Ad Valorem Taxes	136	215	284	299	242	651	965	861	938	982	1,000	1,012	1,025	1,036	1,042	1,052	1,068
Depletion, Depreciation, and Amortization	1,480	1,400	1,534	1,711	1,639	2,498	2,530	2,866	3,116	3,193	3,384	3,569	3,735	3,886	4,012	4,142	4,277
Purchased Commodities	1,597	1,807	3,930	4,472	3,633	6,560	8,235	8,339	9,088	9,506	9,688	9,803	9,926	10,036	10,088	10,192	10,344
Impairment Expenses	32	285	77	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exploration and Abandonments	119	106	114	58	47	51	41	77	71	65	59	59	60	62	64	63	62
Selling, General and Administrative	325	326	381	324	244	292	334	318	317	316	306	304	312	315	313	312	311
Other Operating Expenses	18	19	14	10	9	7	15	50	54	57	58	58	59	60	60	61	62
Implied Interest on Operating Leases				40	12	9	9	51	52	51	50	55	54	54	54	55	56
Accretion Expense	18	19	14	10	9	7	15	50	54	57	58	58	59	60	60	61	62
EBITA	**(355)**	**526**	**2,176**	**1,873**	**508**	**6,528**	**10,318**	**9,101**	**9,972**	**10,524**	**10,621**	**10,605**	**10,613**	**10,622**	**10,573**	**10,598**	**10,690**
Marginal Tax Rate %	35.0%	35.0%	21.0%	21.0%	21.0%	21.0%	21.5%	21.5%	21.5%	21.5%	21.5%	21.5%	21.5%	21.5%	21.5%	21.5%	21.5%
Adjustment for Taxes:																	
Income Tax Expense	(403)	(524)	276	231	(61)	628	2,106	1,934	2,096	2,207	2,216	2,202	2,193	2,185	2,164	2,160	2,171
Non Operating Expense Tax Shield:																	
Interest	72	54	26	25	27	34	27	93	123	134	145	156	166	175	185	194	203
Non-Operating Losses	11	19	8	16	(14)	5	26	-	-	-	-	-	-	-	-	-	-
Implied Interest on Operating Leases	-	-	-	15	10	21	21	32	33	33	32	35	35	35	35	36	36
Tax on Non-Operating Income																	
Interest	-	-	-	3.6	1.1	0.2	-	-	-	-	-	-	-	-	-	-	-
Deferred Compensation	-	-	-	3	1	2	-	-	-	-	-	-	-	-	-	-	-
Other Income	11	19	8	16	(14)	5	26	-	-	-	-	-	-	-	-	-	-
Derivative Gain	(56)	(35)	(61)	7	(59)	(458)	(68)	-	-	-	-	-	-	-	-	-	-
Disposition of Assets	1	73	61	(100)	2	(224)	23	-	-	-	-	-	-	-	-	-	-
Total Adjusted Taxes	**(364)**	**(396)**	**318**	**217**	**(107)**	**13**	**2,160**	**2,059**	**2,252**	**2,374**	**2,394**	**2,393**	**2,394**	**2,395**	**2,384**	**2,390**	**2,410**
Change in Deferred Taxes	(1,397)	498	(253)	(237)	23	(672)	(1,829)	(629)	(394)	(400)	(394)	(370)	(335)	(339)	(340)	(322)	(316)
NOPLAT	**(1,388)**	**1,419**	**1,605**	**1,419**	**638**	**5,843**	**6,329**	**6,413**	**7,326**	**7,750**	**7,833**	**7,841**	**7,883**	**7,888**	**7,849**	**7,886**	**7,964**
Invested Capital (IC):																	
Operating Current Assets:																	
Normal Cash	259	370	638	632	453	993	1,647	1,608	1,752	1,833	1,868	1,890	1,914	1,935	1,945	1,965	1,994
Accounts Receivable	518	644	814	1035	695	1685	1,853	2,648	2,886	3,019	3,077	3,113	3,152	3,187	3,204	3,237	3,285
Inventory	181	212	242	205	224	369	424	445	458	454	463	469	474	480	482	487	494
Income Taxes Receivable	3	7	7	7	0	0	164	-	-	-	-	-	-	-	-	-	-
Other Operating Current Assets	0	24	25	20	52	42	81	46	47	47	48	48	49	49	50	50	51
Non Interest-Bearing Operating Current Liabilities:																	
Accounts Payable	741	1174	1441	1221	928	2380	2,487	2,619	2,848	3,081	3,310	3,526	3,721	3,918	4,117	4,304	4,488
Income Taxes Payable	0	0	2	3	4	45	63	-	-	-	-	-	-	-	-	-	-
Other Current Liabilities	61	106	112	431	363	513	206	459	500	540	581	618	653	687	722	755	787
Operating Working Capital	159	(23)	171	244	129	151	1,413	1,669	1,796	1,732	1,565	1,375	1,215	1,046	842	680	549
Oil & Gas PP&E	19,052	20,962	21,766	23,028	24,510	40,517	44,473	49,225	54,341	59,547	64,653	69,600	74,394	79,021	83,432	87,668	91,761
Accumulated Depreciation	(8,211)	(9,196)	(8,218)	(8,583)	(10,071)	(12,335)	(14,843)	(17,709)	(20,825)	(24,018)	(27,402)	(30,971)	(34,706)	(38,592)	(42,604)	(46,746)	(51,023)
Other PP&E (Net)	1,529	1,762	1,291	1,632	1,584	1,694	1,658	1,870	2,100	2,341	2,587	2,836	3,088	3,343	3,599	3,857	4,120
Net PP&E	12,370	13,528	14,839	16,077	16,023	29,876	31,288	33,385	35,616	37,871	39,838	41,465	42,775	43,771	44,427	44,779	44,858
Net Other Operating Assets																	
Operating Lease Right of Use	-	-	-	280	197	348	340	577	591	574	568	621	614	613	617	630	636
Capitalized PV of Operating Leases	84	372	728	276	189	299	278	-	-	-	-	-	-	-	-	-	-
Other Operating Assets	99	198	220	258	153	171	143	584	637	666	679	687	695	703	707	714	725
Total Other Operating Assets	183	570	948	814	539	818	761	1,161	1,228	1,240	1,246	1,307	1,309	1,316	1,324	1,344	1,361
Other Operating Liabilities																	
Other non-interest bearing operating liabilities	350	391	538	1046	1052	907	988	1,402	1,605	1,824	2,014	2,013	1,967	2,148	2,321	2,445	2,552
Total Other Operating Liabilities	**350**	**391**	**538**	**1046**	**1052**	**907**	**988**	**1,402**	**1,605**	**1,824**	**2,014**	**2,013**	**1,967**	**2,148**	**2,321**	**2,445**	**2,552**
Total Invested Capital	12,362	13,683	15,421	16,089	15,639	29,938	32,474	34,813	37,035	39,018	40,635	42,134	43,333	43,984	44,272	44,358	44,215
Free Cash Flow (FCF):																	
NOPLAT	(1,388)	1,419	1,605	1,419	638	5,843	6,329	6,413	7,326	7,750	7,833	7,841	7,883	7,888	7,849	7,886	7,964
Change in IC		1,321	1,737	668	(450)	14,299	2,536	2,339	2,222	1,983	1,616	1,500	1,199	651	288	87	(143)
FCF	**(1,388)**	**98**	**(133)**	**750**	**1,088**	**(8,455)**	**3,792**	**4,074**	**5,104**	**5,767**	**6,217**	**6,341**	**6,685**	**7,237**	**7,561**	**7,799**	**8,108**
Return on Invested Capital (ROIC):																	
NOPLAT	(1,388)	1,419	1,605	1,419	638	5,843	6,329	6,413	7,326	7,750	7,833	7,841	7,883	7,888	7,849	7,886	7,964
Beginning IC		12,362	13,683	15,421	16,089	15,639	29,938	32,474	34,813	37,035	39,018	40,635	42,134	43,333	43,984	44,272	44,358
ROIC		**11.48%**	**11.73%**	**9.20%**	**3.96%**	**37.36%**	**21.14%**	**19.75%**	**21.04%**	**20.93%**	**20.08%**	**19.30%**	**18.71%**	**18.20%**	**17.84%**	**17.81%**	**17.95%**
Economic Profit (EP):																	
Beginning IC		12,362	13,683	15,421	16,089	15,639	29,938	32,474	34,813	37,035	39,018	40,635	42,134	43,333	43,984	44,272	44,358
x (ROIC - WACC)		-0.19%	0.05%	-2.47%	-7.71%	25.69%	9.47%	8.08%	9.37%	9.25%	8.40%	7.62%	7.04%	6.53%	6.17%	6.14%	6.28%
EP		**(24)**	**7**	**(381)**	**(1,240)**	**4,018**	**2,834**	**2,623**	**3,262**	**3,427**	**3,279**	**3,098**	**2,965**	**2,830**	**2,715**	**2,719**	**2,787**

Pioneer Natural Resources (PXD)

Weighted Average Cost of Capital (WACC) Estimation

Cost of Equity:		*ASSUMPTIONS:*
Risk-Free Rate	3.59%	*10-year treasury bond*
Beta	1.44	*Regression tracked on the 5 year returns on PXD (Source: Bloomberg)*
Equity Risk Premium	5.95%	*Bloomberg ERP associated with PXD, compared to the market*
Cost of Equity	**12.15%**	
Cost of Debt:		
Risk-Free Rate	3.59%	*10-year treasury bond*
Implied Default Premium	5.22%	*The spread between the company's credit rating (BBB+, via Fitch) and the risk-free rate*
Pre-Tax Cost of Debt	8.80%	*Last YTM on PXD's 10yr corporate bond (sourced from FINRA & FactSet)*
Marginal Tax Rate	22%	
After-Tax Cost of Debt	**6.86%**	

Market Value of Common Equity:		**MV Weights**	
Total Shares Outstanding	246		
Current Stock Price	$210.77		
MV of Equity	**51,849.42**	90.91%	
Market Value of Debt:			*Include all sources of debt.*
Short-Term Debt	0		
Current Portion of LTD	779		
Long-Term Debt	4125		
PV of Operating Leases	277.8		
MV of Total Debt	**5,181.78**	9.09%	
Market Value of the Firm	**57,031.20**	100.00%	
	Estimated WACC	**11.67%**	

Pioneer Natural Resources (PXD)

Discounted Cash Flow (DCF) and Economic Profit (EP) Valuation Models

Key Inputs:	
CV Growth of NOPLAT	2.50%
CV Year ROIC	17.95%
WACC	11.67%
Cost of Equity	12.15%

Fiscal Years Ending Dec. 31	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
DCF Model:										
Free Cash Flow (FCF)	4,074	5,104	5,767	6,217	6,341	6,685	7,237	7,561	7,799	
Continuing Value (CV)										74,740
PV of FCF	3,648	4,093	4,141	3,998	3,651	3,447	3,342	3,126	2,888	27,672
Value of Operating Assets:	60,005									
Non-Operating Adjustments										
Excess Cash	**2,525**									
Marketable Securities										
Investments in Affilliate	**158**									
Goodwill	**243**									
Short Term Debt	**968**									
Interest Payable	**104**									
Short Term Derivatives	**288**									
Long Term Debt	**5,567**									
Long Term Derivatives	-									
Short Term Operating Leases	**199**									
Long Term Operating Leases	**362**									
ESOP	**374**									
Value of Equity	55,070									
Shares Outstanding	243.0									
Intrinsic Value of Last FYE	$ 226.67									
Implied Price as of Today	$ 226.13									
EP Model:										
Economic Profit (EP)	2,623	3,262	3,427	3,279	3,098	2,965	2,830	2,715	2,719	
Continuing Value (CV)										30,382
PV of EP	2,349	2,616	2,461	2,108	1,784	1,529	1,307	1,122	1,007	11,249
Total PV of EP	27,532									
Invested Capital (last FYE)	32,474									
Value of Operating Assets:	60,005									
Non-Operating Adjustments										
Excess Cash	**2,525**									
Investments in Affilate	**158**									
Goodwill	**243**									
Interest Payable	**104**									
ST Derivatives	**288**									
Short Term Debt	**968**									
Long Term Debt	**5,567**									
ST Operating Leases	**199**									
LT Operating Leases	**362**									
ESOP	**374**									
Value of Equity	55,070									
Shares Outstanding	243.0									
Intrinsic Value of Last FYE	$ 226.67									
Implied Price as of Today	$ 226.13									

Pioneer Natural Resources (PXD)
Net Asset Value (NAV) Model

Total Development Costs	
% Development/Year	12%
Discount Rate	10%

Oil (MBbls)		NGL (MBbls)		Gas (MMcf)	
PD Reserves	861,973	PD Reserves	660,066	PD Reserves	3,574,429
PUD Reserves	110,045	PUD Reserves	78,379	PUD Reserves	422,562
Total P1	972,018	**Total P1**	738,445	**Total P1**	3,996,991

	Production	Crude Oil			Nat Gas - Liquids			Nat Gas			Total Production	Revenues (BOE)
	Decline	*MBbls*	Production	Price	Reserves	Production	Price	Reserves	Production	Price	Oil, NGL, and Nat Gas	Oil
	Rate	Reserves	*MBbls*	*$/bbl*	*MBbls*	*MBbls*	*$/bbl*	*MMcf*	*MMcf*	*$/MMcf*	*MBOE*	*$MM*
1	25.0%	972,018	243,005	$ 81.60	738,445	184,611	$ 2.94	3,996,991	999,248	$ 2.94	**594,157**	19,829.17
2	20.0%	729,014	145,803	$ 75.31	553,834	110,767	$ 4.12	2,997,743	599,549	$ 3.75	**356,494**	10,980.40
3	21.7%	583,211	126,557	$ 69.94	443,067	96,146	$ 4.72	2,398,195	520,408	$ 4.65	**309,437**	8,851.38
4	11.2%	456,654	51,145	$ 66.23	346,921	38,855	$ 4.90	1,877,786	210,312	$ 4.85	**125,052**	3,387.35
5	10.0%	405,509	40,551	$ 62.58	308,066	30,807	$ 4.80	1,667,474	166,747	$ 4.30	**99,149**	2,537.67
6	15.0%	364,958	54,744	$ 59.73	277,260	41,589	$ 4.60	1,500,727	225,109	$ 4.30	**133,851**	3,269.84
7	14.0%	310,214	43,430	$ 60.00	235,671	32,994	$ 4.50	1,275,618	178,586	$ 4.40	**106,188**	2,605.80
8	13.0%	266,784	34,682	$ 60.00	202,677	26,348	$ 4.45	1,097,031	142,614	$ 4.40	**84,799**	2,080.92
9	12.5%	232,102	29,013	$ 53.03	176,329	22,041	$ 4.45	954,417	119,302	$ 4.40	**70,938**	1,538.55
10	10.0%	203,090	20,309	$ 51.45	154,288	15,429	$ 4.45	835,115	83,512	$ 4.40	**49,656**	1,044.85
11	8.0%	182,781	14,622	$ 51.45	138,859	11,109	$ 4.45	751,604	60,128	$ 4.40	**35,753**	752.30
12	5.0%	168,158	8,408	$ 51.45	127,750	6,388	$ 4.45	691,475	34,574	$ 4.40	**20,558**	432.57
13	5.0%	159,750	7,988	$ 51.45	121,363	6,068	$ 4.45	656,902	32,845	$ 4.40	**19,530**	410.94
14	5.0%	151,763	7,588	$ 51.45	115,295	5,765	$ 4.45	624,056	31,203	$ 4.40	**18,553**	390.39
15	5.0%	144,175	7,209	$ 51.45	109,530	5,476	$ 4.45	592,854	29,643	$ 4.40	**17,626**	370.87
16	5.0%	136,966	6,848	$ 51.45	104,053	5,203	$ 4.45	563,211	28,161	$ 4.40	**16,744**	352.33
17	5.0%	130,118	6,506	$ 51.45	98,851	4,943	$ 4.45	535,050	26,753	$ 4.40	**15,907**	334.71
18	5.0%	123,612	6,181	$ 51.45	93,908	4,695	$ 4.45	508,298	25,415	$ 4.40	**15,112**	317.98
19	5.0%	117,431	5,872	$ 51.45	89,213	4,461	$ 4.45	482,883	24,144	$ 4.40	**14,356**	302.08
20	5.0%	111,560	5,578	$ 51.45	84,752	4,238	$ 4.45	458,739	22,937	$ 4.40	**13,638**	286.98
21	5.0%	105,982	5,299	$ 51.45	80,515	4,026	$ 4.45	435,802	21,790	$ 4.40	**12,956**	272.63
22	5.0%	100,682	5,034	$ 51.45	76,489	3,824	$ 4.45	414,012	20,701	$ 4.40	**12,309**	259.00
23	5.0%	95,648	4,782	$ 51.45	72,664	3,633	$ 4.45	393,311	19,666	$ 4.40	**11,693**	246.05
24	5.0%	90,866	4,543	$ 51.45	69,031	3,452	$ 4.45	373,646	18,682	$ 4.40	**11,109**	233.74
25	5.0%	86,323	4,316	$ 51.45	65,580	3,279	$ 4.45	354,963	17,748	$ 4.40	**10,553**	222.06
26	5.0%	82,007	4,100	$ 51.45	62,301	3,115	$ 4.45	337,215	16,861	$ 4.40	**10,025**	210.95
27	5.0%	77,906	3,895	$ 51.45	59,186	2,959	$ 4.45	320,354	16,018	$ 4.40	**9,524**	200.41
28	5.0%	74,011	3,701	$ 51.45	56,226	2,811	$ 4.45	304,337	15,217	$ 4.40	**9,048**	190.39
29	5.0%	70,310	3,516	$ 51.45	53,415	2,671	$ 4.45	289,120	14,456	$ 4.40	**8,596**	180.87
30	5.0%	66,795	3,340	$ 51.45	50,744	2,537	$ 4.45	274,664	13,733	$ 4.40	**8,166**	171.82
31	5.0%	63,455	3,173	$ 51.45	48,207	2,410	$ 4.45	260,931	13,047	$ 4.40	**7,758**	163.23
32	5.0%	60,282	3,014	$ 51.45	45,797	2,290	$ 4.45	247,884	12,394	$ 4.40	**7,370**	155.07
33	5.0%	57,268	2,863	$ 51.45	43,507	2,175	$ 4.45	235,490	11,774	$ 4.40	**7,001**	147.32
34	5.0%	54,405	2,720	$ 51.45	41,331	2,067	$ 4.45	223,715	11,186	$ 4.40	**6,651**	139.95

	Revenues (BOE)			Production Costs						Taxes		After-Tax	Discount	PV of Reserves
	Natural Gas	Gas	Total	LOE	GP&T	Workover	Net NG Plant Income	Total Production Cost	Total	Production	Ad Valorem	Total Production	Factor	
	$MM	*$MM*	*$MM*	*$/BOE*	*$/BOE*	*$/BOE*	*$/BOE*	*$/BOE*	*$MM*	*%*	*%*	Revenue		
1	541.83	489.13	$ **20,860**	$ 5.61	$ 4.50	$ 1.00	$ (0.75)	$ **12.00**	7,130	21.0%	1.5%	$ 10,640.94	1.10	$ 9,673.58
2	456.86	2,248.31	$ **13,686**	$ 3.83	$ 4.40	$ 1.00	$ (0.75)	$ **8.48**	3,024	21.0%	1.5%	$ 8,262.53	1.21	$ 6,828.54
3	453.61	2,419.90	$ **11,725**	$ 7.37	$ 4.30	$ 1.00	$ (0.75)	$ **11.92**	3,688	21.0%	1.5%	$ 6,228.80	1.33	$ 4,679.79
4	190.39	1,020.01	$ **4,598**	$ 6.25	$ 4.20	$ 1.00	$ (0.75)	$ **10.70**	1,338	21.0%	1.5%	$ 2,526.01	1.46	$ 1,725.30
5	147.87	717.01	$ **3,403**	$ 4.96	$ 4.10	$ 0.90	$ (0.75)	$ **9.21**	913	21.0%	1.5%	$ 1,929.48	1.61	$ 1,198.06
6	191.31	967.97	$ **4,429**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	1,305	21.0%	1.5%	$ 2,420.82	1.77	$ 1,366.49
7	148.47	785.78	$ **3,540**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	1,036	21.0%	1.5%	$ 1,940.89	1.95	$ 995.98
8	117.25	627.50	$ **2,826**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	827	21.0%	1.5%	$ 1,548.92	2.14	$ 722.58
9	98.08	524.93	$ **2,162**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	692	21.0%	1.5%	$ 1,139.01	2.36	$ 483.05
10	68.66	367.45	$ **1,481**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	484	21.0%	1.5%	$ 772.41	2.59	$ 297.80
11	49.43	264.56	$ **1,066**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	349	21.0%	1.5%	$ 556.13	2.85	$ 194.92
12	28.42	152.12	$ **613**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	201	21.0%	1.5%	$ 319.78	3.14	$ 101.89
13	27.00	144.52	$ **582**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	190	21.0%	1.5%	$ 303.79	3.45	$ 88.00
14	25.65	137.29	$ **553**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	181	21.0%	1.5%	$ 288.60	3.80	$ 76.00
15	24.37	130.43	$ **526**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	172	21.0%	1.5%	$ 274.17	4.18	$ 65.63
16	23.15	123.91	$ **499**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	163	21.0%	1.5%	$ 260.46	4.59	$ 56.68
17	21.99	117.71	$ **474**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	155	21.0%	1.5%	$ 247.44	5.05	$ 48.95
18	20.89	111.83	$ **451**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	147	21.0%	1.5%	$ 235.07	5.56	$ 42.28
19	19.85	106.23	$ **428**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	140	21.0%	1.5%	$ 223.31	6.12	$ 36.51
20	18.86	100.92	$ **407**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	133	21.0%	1.5%	$ 212.15	6.73	$ 31.53
21	17.91	95.88	$ **386**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	126	21.0%	1.5%	$ 201.54	7.40	$ 27.23
22	17.02	91.08	$ **367**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	120	21.0%	1.5%	$ 191.46	8.14	$ 23.52
23	16.17	86.53	$ **349**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	114	21.0%	1.5%	$ 181.89	8.95	$ 20.31
24	15.36	82.20	$ **331**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	108	21.0%	1.5%	$ 172.79	9.85	$ 17.54
25	14.59	78.09	$ **315**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	103	21.0%	1.5%	$ 164.15	10.83	$ 15.15
26	13.86	74.19	$ **299**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	98	21.0%	1.5%	$ 155.95	11.92	$ 13.08
27	13.17	70.48	$ **284**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	93	21.0%	1.5%	$ 148.15	13.11	$ 11.30
28	12.51	66.95	$ **270**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	88	21.0%	1.5%	$ 140.74	14.42	$ 9.76
29	11.88	63.61	$ **256**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	84	21.0%	1.5%	$ 133.71	15.86	$ 8.43
30	11.29	60.43	$ **244**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	80	21.0%	1.5%	$ 127.02	17.45	$ 7.28
31	10.73	57.40	$ **231**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	76	21.0%	1.5%	$ 120.67	19.19	$ 6.29
32	10.19	54.53	$ **220**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	72	21.0%	1.5%	$ 114.64	21.11	$ 5.43
33	9.68	51.81	$ **209**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	68	21.0%	1.5%	$ 108.90	23.23	$ 4.69
34	9.20	49.22	$ **198**	$ 5.60	$ 4.00	$ 0.90	$ (0.75)	$ **9.75**	65	21.0%	1.5%	$ 103.46	25.55	$ 4.05
												PV of Reserves		**$ 28,887.64**

Transportation Costs: Directly correlated with the price of WTI, as well as the decreasing spread between Brent Crude and WTI

Total Acreage		Avg Cost Per Acerage	Value of
Midland Basin		**Panhandle & South Plains**	**Net**
Gross	964,000	*$/acre*	**Acreage**
Net	856,000	$ 1,527	$ 1,307,112,000

* All operations occur within the Spraberry/Wolfcamp fields

PV of Reserves Production	28,888	
PLUS: C&CE	1,032	
PLUS: A/R	1,853	
PLUS: Inventories	424	
PLUS: Total Net PP&E	31,288	
PLUS: MV of Net Acreage	1,307	
		$ 64,792
LESS: A/P	2637	
LESS: Repayment of Debt	4904	**$ 7,541**
Net Asset Value		**$ 57,251**
Equity Value	$ 51,849	
Shares Outstanding	242.95	
Implied Price	$ 235.64	
P/NAV		**0.91x**

Footnotes:
Decline Rate: Sourced from The University of Michigan's Net Asset Valuation of Whiting, where they used the average decline rate among wells in the Permian Basin
file:///C:/Users/gavmccarthy/Downloads/NET%20ASSET%20VALUATION%20OF%20WHITING%20PETROLEUM_S%20ACQUISITION%20OF%20KODIAK.pdf
Reserves Volumes: sourced from Pioneer's most recent 10-K
LOE: Flatlined as an average of the price attributable to each barrel of oil throughout the next 5 years (which was sourced from the operating lease tab)
GP&T: Used the most recent fiscal year's GP&T cost, and flatlined it at a discount due to economics of scale. These costs are historically stable
Workover:
Net NG Plant Income:

Pioneer Natural Resources (PXD)

Dividend Discount Model (DDM) or Fundamental P/E Valuation Model

Fiscal Years Ending Dec. 31	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**	**2029E**	**2030E**	**2031E**	**2032E**
EPS	$ 27.44	$ 29.52	$ 30.87	$ 30.79	$ 30.38	$ 30.04	$ 29.72	$ 29.23	$ 28.96	$ 28.91
Key Assumptions										
CV growth of EPS	2.50%									
CV Year ROE	48.00%									
Cost of Equity	12.15%									
Future Cash Flows										
P/E Multiple (CV Year)										9.82
EPS (CV Year)										$ 28.91
Future Stock Price										$ 283.86
Dividends Per Share	18.502551	20.02737	21.23129	21.6668	21.50612	21.60598	22.27121	22.40685	22.39924	
Discounted Cash Flows	16.497598	15.92217	15.05025	13.69466	12.12014	10.85697	9.97855	8.951454	7.978756	$ 101.11
Intrinsic Value as of Last FYE	$ 212.16									
Implied Price as of Today	$ 211.66									

Pioneer Natural Resources (PXD)

Relative Valuation Models

Ticker	Company	Price	EPS 2023E	EPS 2024E	P/E 23	P/E 24	Est. 5yr EPS gr.	PEG 23	PEG 24	BV Equity	Tangible BV Equity	P/B	Tangible P/B
EOG	EOG Resources	$114.63	$12.46	$12.96	9.20	8.84	24.3	0.38	0.36	37.34	37.34	3.07	3.07
OXY	Occidental Petroleum	$62.43	$5.43	$5.51	11.50	11.33	48.8	0.24	0.23	22.38	22.38	2.79	2.79
FANG	Diamondback Energy	$135.17	$20.79	$22.01	6.50	6.14	37.9	0.17	0.16	82.42	82.42	1.64	1.64
MTDR	Matador Resources	$47.65	$7.68	$9.47	6.20	5.03	52.4	0.12	0.10	21.76	21.76	2.19	2.19
PR	Permian Resources A	$10.50	$2.00	$2.22	5.25	4.73	38.2	0.14	0.12	11.41	11.41	0.92	0.92
SM	SM Energy	$28.16	$6.07	$7.00	4.64	4.02	10.0	0.46	0.40	20.00	16.00	1.41	1.76
HHH	Company Name	$20.00	$1.00	$1.20	20.00	16.67	10.0	2.00	1.67	20.00	16.00	1.00	1.25
				Average	**7.01**	**6.45**		**0.47**	**0.40**			**1.85**	**1.98**
PXD	Pioneer Natural Resour	$210.77	$1.00	$1.20	210.8	175.6	10.0	21.1	17.6	30.00	20.00	7.03	10.54

Implied Relative Value:	
P/E (EPS23)	**$ 7.01**
P/E (EPS24)	**$ 7.74**
PEG (EPS23)	**$ 4.65**
PEG (EPS24)	**$ 4.86**
P/B	**$ 55.58**
P/Tangible BV	**$ 39.68**

Pioneer Natural Resources (PXD)
Key Management Ratios

Fiscal Years Ending Dec. 31	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Liquidity Ratios:																
Current Ratio	1.41x	1.42x	0.88x	1.36x	1.52x	0.96x	1.35x	1.48x	1.63x	1.77x	1.91x	2.07x	2.27x	2.46x	2.67x	2.89x
Quick Ratio	1.31x	1.29x	0.80x	1.24x	1.42x	0.85x	1.26x	1.40x	1.55x	1.70x	1.84x	2.00x	2.20x	2.40x	2.61x	2.83x
Cash Ratio	1.00x	0.82x	0.37x	0.85x	1.00x	0.31x	0.69x	0.83x	1.00x	1.18x	1.35x	1.53x	1.75x	1.96x	2.19x	2.43x
Cash & ST Investments/Current Assets	0.71x	0.58x	0.42x	0.63x	0.66x	0.32x	0.51x	0.56x	0.61x	0.67x	0.71x	0.74x	0.77x	0.80x	0.82x	0.84x
CFO/Current Liabilities	0.99x	1.78x	1.25x	1.09x	1.50x	2.92x	2.02x	2.01x	1.98x	1.88x	1.74x	1.66x	1.64x	1.56x	1.49x	1.45x
Asset-Management Ratios:																
Total Asset Turnover	32.1%	52.6%	48.9%	34.8%	39.8%	68.0%	57.1%	57.2%	55.3%	52.5%	49.8%	47.8%	45.9%	43.9%	42.4%	41.3%
Days Sales Outstanding	43.1	31.6	40.5	37.9	42.0	27.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
Inventory Turnover	3.0	3.8	3.9	3.2	4.3	4.8	4.6	4.8	5.0	5.1	5.1	5.1	5.1	5.0	5.1	5.1
Financial Leverage Ratios:																
LT Debt/Total Equity	20.3%	18.9%	16.6%	28.3%	32.6%	21.6%	22.5%	22.6%	22.6%	22.6%	22.6%	22.4%	22.4%	22.5%	22.5%	22.5%
LT Debt/Total Assets	12.8%	12.0%	9.7%	15.7%	19.2%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%
Total Debt/Total Assets (%)	15.3%	12.0%	12.6%	16.8%	20.2%	15.9%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%
Total Debt/Equity (%)	24.2%	18.9%	21.4%	30.3%	34.3%	25.6%	26.4%	26.5%	26.5%	26.6%	26.5%	26.3%	26.3%	26.4%	26.4%	26.4%
Profitability Ratios:																
Return on Equity (NI/Beg TSE)	7.6%	8.3%	6.4%	-1.7%	12.3%	34.5%	29.6%	29.2%	28.4%	26.4%	24.4%	22.8%	21.4%	20.1%	19.1%	18.4%
Operating Margin	15.7%	24.2%	19.9%	7.5%	36.6%	42.4%	43.0%	43.1%	43.4%	43.0%	42.5%	42.1%	41.7%	41.3%	41.0%	40.8%
Gross Margin	21.8%	28.2%	23.2%	11.0%	38.3%	43.8%	44.3%	44.3%	44.6%	44.1%	43.6%	43.2%	42.8%	42.4%	42.1%	41.9%
Net Margin	15.6%	10.4%	8.0%	-2.9%	11.8%	32.1%	28.1%	27.9%	28.1%	27.7%	27.2%	26.8%	26.4%	26.0%	25.7%	25.4%
FCF Margin	-11.5%	-5.9%	-1.1%	5.1%	15.8%	30.0%	21.7%	21.7%	22.8%	23.6%	23.5%	24.0%	25.6%	26.4%	26.7%	27.3%
ROA	4.7%	5.3%	3.9%	-1.0%	7.1%	20.8%	17.3%	16.7%	16.2%	15.1%	14.0%	13.1%	12.4%	11.7%	11.1%	10.7%
ROIC	6.2%	7.0%	5.4%	-1.4%	9.4%	27.1%	19.7%	21.0%	20.9%	20.1%	19.3%	18.7%	18.2%	17.8%	17.8%	18.0%
Payout Policy Ratios:																
Dividend Payout Ratio (Dividend/EPS)	1.6%	5.6%	26.0%	0.0%	79.3%	81.8%	68.3%	68.2%	68.7%	69.8%	69.7%	70.3%	72.8%	73.9%	74.0%	74.4%

Pioneer Natural Resources (PXD)
Present Value of Operating Lease Obligations

Fiscal Years Ending Dec. 31	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Year 1	24.1	25.3	30.0	24.0	26.0	27.0	234.0	149.0	107.0	131.0	106.0
Year 2	17.4	18.5	22.0	23.0	24.0	42.0	169.0	92.0	63.0	78.0	93.0
Year 3	15.5	16.1	20.0	21.0	23.0	53.0	97.0	47.0	26.0	44.0	42.0
Year 4	14.2	15.6	19.0	21.0	18.0	40.0	66.0	13.0	8.0	19.0	20.0
Year 5	14.3	15.4	19.0	17.0	4.0	37.0	40.0	8.0	5.0	21.0	20.0
Thereafter	37.0	26.6	27.0	15.0	11.0	680.0	647.0	18.0	14.0	98.0	78.0
Total Minimum Payments	122.5	117.5	137.0	121.0	106.0	879.0	1253.0	327.0	223.0	391.0	359.0
Less: Cumulative Interest	33.2	29.3	33.3	28.0	22.3	507.5	524.6	51.0	34.4	92.3	81.2
PV of Minimum Payments	**89.3**	**88.2**	**103.7**	**93.0**	**83.7**	**371.5**	**728.4**	**276.0**	**188.6**	**298.7**	**277.8**
Implied Interest in Year 1 Payment		**7.9**	**7.8**	**9.1**	**8.2**	**7.4**	**32.7**	**64.1**	**24.3**	**16.6**	**26.3**
Pre-Tax Cost of Debt	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%
Years Implied by Year 6 Payment	2.6	1.7	1.4	1.0	2.8	18.4	16.2	2.3	2.8	4.7	3.9
Expected Obligation in Year 6 & Beyond	14.3	15.4	19	15	4	37	40	8	5	21	20
Present Value of Lease Payments											
PV of Year 1	22.2	23.3	27.6	22.1	23.9	24.8	215.1	136.9	98.3	120.4	97.4
PV of Year 2	14.7	15.6	18.6	19.4	20.3	35.5	142.8	77.7	53.2	65.9	78.6
PV of Year 3	12.0	12.5	15.5	16.3	17.9	41.2	75.3	36.5	20.2	34.2	32.6
PV of Year 4	10.1	11.1	13.6	15.0	12.8	28.5	47.1	9.3	5.7	13.6	14.3
PV of Year 5	9.4	10.1	12.5	11.2	2.6	24.3	26.2	5.2	3.3	13.8	13.1
PV of 6 & beyond	20.9	15.6	16.0	9.0	6.2	217.3	221.9	10.3	7.8	50.9	41.8
Capitalized PV of Payments	89.3	88.2	103.7	93.0	83.7	371.5	728.4	276.0	188.6	298.7	277.8

Pioneer Natural Resources (PXD)

Effects of ESOP Exercise and Share Repurchases on Common Stock Account and Number of Shares Outstanding

Number of Options Outstanding (shares):	6
Average Time to Maturity (years):	2.24
Expected Annual Number of Options Exercised:	3
Current Average Strike Price:	$ 113.76
Cost of Equity:	12.15%
Current Stock Price:	$210.77

Fiscal Years Ending Dec. 31	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Increase in Shares Outstanding:	3	3	3	3	3	3	3	3	3	3
Average Strike Price:	$ 113.76	$ 113.76	$ 113.76	$ 113.76	$ 113.76	$ 113.76	$ 113.76	$ 113.76	$ 113.76	$ 113.76
Increase in Common Stock Account:	**307**	**307**	**307**	**307**	**307**	**307**	**307**	**307**	**307**	**307**
Share Repurchases ($)	**-54**	**198**	**201**	**197**	**191**	**185**	**179**	**171**	**164**	**158**
Expected Price of Repurchased Shares:	$ 210.77	$ 207.72	$ 204.71	$ 201.75	$ 198.83	$ 195.96	$ 193.12	$ 190.33	$ 187.57	$ 184.86
Number of Shares Repurchased:	**(0)**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Shares Outstanding (beginning of the year)	240	243	245	246	248	250	252	253	255	257
Plus: Shares Issued Through ESOP	3	3	3	3	3	3	3	3	3	3
Less: Shares Repurchased in Treasury	(0)	1	1	1	1	1	1	1	1	1
Shares Outstanding (end of the year)	**243**	**245**	**246**	**248**	**250**	**252**	**253**	**255**	**257**	**259**

Pioneer Natural Resources (PXD)

Valuation of Options Granted under ESOP

Current Stock Price	$210.77
Risk Free Rate	3.59%
Current Dividend Yield	13.60%
Annualized St. Dev. of Stock Returns	40.00%

Range of Outstanding Options	Number of Shares	Average Exercise Price	Average Remaining Life (yrs)	B-S Option Price	Value of Options Granted
2006 Long Term Incentive Plan	6.039	113.76	2.24	$ 61.93	$ 374
Total	6	$ 113.76	2.24	$ 107.87	**$ 374**