



Chevron Corporation

Chevybody Wants Some

- COVID-19 didn't take it easy on any industry, especially the energy sector. With economies shutting down, the demand for oil, natural gas, or any other form of energy reduced significantly. However, CVX is positioned perfectly for the uptick in oil and natural gas demand.
- CVX's LNG facilities, Gorgon and Wheatstone, located in West Australia, have a combined capacity of producing well over 2.3bcf/d. Unfortunately, that number was not even close to being touched due to the reduction in demand for LNG.
- With an upcoming boom of LNG due to its environmental advantage over traditional oil-powered energy solutions, CVX is well positioned to capitalize on it. Accounting for 50% of Australia's LNG production, CVX is ready to capture the upcoming growth Australia will see. Between 2021 and 2026, demand for LNG is expected to grow at a 6% CAGR. This sets up CVX to be the main supplier of LNG in that region and experience tremendous short-term success.
- Compared to competitors, CVX's balance sheet is the strongest. Having the best discipline when it comes to cash management and paying down debt puts them in a better financial position than most. In addition, CVX also has the lowest dividend breakeven compared to all US competitors.
- CVX currently trades at \$102.96 with an NTM EV/EBITDA multiple of 6.92x, resending a ~11.7% discount to its one-year average of 7.7x. With a target price of \$121.55, that would represent a 18.1% upside to its current price.

COMPANY OVERVIEW

Founded in 1906 and headquartered in San Ramon, CA, Chevron Corporation (CVX) satisfies global energy demand as one of the largest integrated energy companies in the industry. CVX derives its revenue from two primary business segments: Downstream (72.1% of FY'20 Revenue) and Upstream (27.9%). The Company's upstream operations include the exploration and transportation of crude oil. The upstream segment also comprises the liquefaction, transportation, and regasification of natural gas. CVX is the largest liquid natural gas (LNG) producer in Australia and plans to keep that status its 47.3% interest in the Gorgon Project. In the downstream segment, CVX primarily refines crude oil into petroleum products, transports and manufactures commodity petrochemicals such as plastics and fuel and lubricant additives. Chevron will report its 1Q'21 results on April 30, 2021.

Symbol	NYSE: CVX
52-Week Range	\$65.16 - 112.70
YTD Performance	21.92%
Market Cap (M)	\$1,928
Enterprise Value (M)	\$205,000
Net Debt (M)	\$42,229
Dividend Yield	5.0%
NTM P/E	17.86x
NTM EV/EBITDA	7.73x
ROE	(4.0%)
ROA	(2.3%)

FY (Jan)	2020A	2021E	2022E
EPS			
Q1	1.29	0.95	1.59
<i>YoY Change</i>		-26.4%	67.4%
Q2	-1.59	1.39	1.57
<i>YoY Change</i>		185.5%	15.4%
Q3	0.11	1.46	1.57
<i>YoY Change</i>		1227.3%	7.5%
Q4	-0.01	1.48	1.58
<i>YoY Change</i>		14,900%	6.8%
Year	-0.20	5.25	6.76

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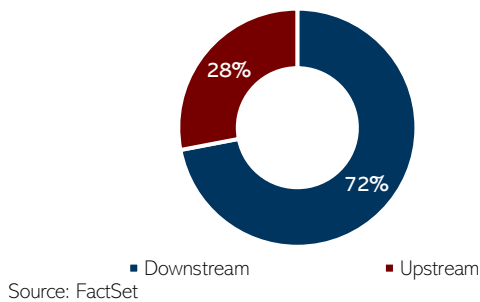
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Source: Bloomberg, FactSet, CapIQ. The Temple University Fox Fund does and seeks to do business with companies covered in its research reports. Thus, investors should be aware that the Fund may have a conflict of interest that could affect the objectivity of this report. All prices are current as of the end of previous trading session from date on which report was issued.

BUSINESS OVERVIEW

Chevron Corporation offers services in over 84 countries worldwide. The Company's primary source of revenue and business is the production and refining of petrochemical materials. CVX, as one of the industry's leading players, exports billions of barrels of petroleum products to economies around the world on a daily basis. To encompass all its products and corresponding revenues in FY'20, CVX reported in two segments: Downstream (72%) and Upstream (28%).

CVX FY'20 Segment Breakdown



Downstream (72% of FY'20 Revenue)

Downstream activities comprise fundamentally of refining crude oil into petroleum products, marketing of crude oil, refined products and lubricants, and transportation of crude oil and refined products. Refined products are transformation of crude oil into usable products. Refinement is the transformation of crude oil into usable products. CVX's shipping facilities include a fleet of 30 ships, each capable of transporting over 80 mm gallons of crude, as well as a 3,000-mile pipe network. The transportation of goods is done by pipelines, mine vessels, motor equipment, and rail cars. This segment also consists of manufacturing and distribution of commodity petrochemicals, industrial plastics, and gasoline and lubricant additives.

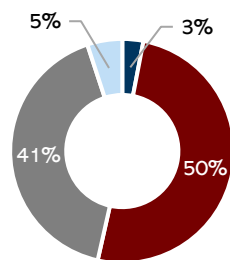
- **Refining:** CVX's refinery network has the capacity to refine up to 1.8 mmb/d of crude oil every day. Its 12 refineries around the world protect raw materials before refining and mixing them into finished goods. The refined products are then distributed globally through retail and commercial networks. CVX benefits from refineries in Thailand, South Korea, and the Philippines while exporting goods to the Asia-Pacific region.
 - Several CVX refinery facilities have undergone renovation programs to upgrade outdated equipment with newer technology, such as mobile worker systems that will increase safety and equipment control.
 - The Company focuses on manufacturing purer hydrogen to eliminate excess impurities from raw materials, as well as safer fuel, in order to satisfy the global rising energy demand in a sustainable manner.
- **Markets:** CVX sells petroleum goods around the world under the main brands "Chevron," "Texaco," and "Caltex.". By the end of 2020, the company had supplied nearly 8,000 Chevron- and Texaco-branded gas stations, mainly in the southern and western states, either directly or through marketers and retailers. CVX owns or leases ~ 310 of these stations
 - CVX supplied nearly 5,600 branded gas stations outside the United States, either directly or through retailers and marketers. Chevron began to expand in northwestern Mexico in 2020, with almost 230 branded stations and it markets commercial aviation fuel to 69 airports worldwide.
- **Lubricants:** CVX is the only corporation that has a fully integrated, wholly owned chemicals, lubricants, and base oil business. Its products are marketed in ~150 countries around the world for consumer, industrial, and medical industries.
 - The Company's strategic relationships with equipment manufacturers, as well as its advanced technology research, allow it to enhance the portfolio's sustainability. CVX used its vast resources in FY'20 to develop the first Havoline green engine oil for passenger vehicles.
 - CVX has laid out various cost and carbon efficient developments in the Gulf of Mexico plants. The Company plans to successfully implement "Whale FID", an improvement in its faculty design and "St. Malo", a waterfall development in FY'21. Moreover, it has "Mad Dog 2" an expansion development planned for FY'22 and "Anchor" an advancing 20k technology for FY'24. These developments are expected to reduce costs and make the GoM plants more carbon efficient in the future making the Company more sustainable as it grows.

Upstream (28% of FY'20 Revenue)

Upstream operations primarily involve exploring, developing, producing, and transporting crude oil and natural gas; refining, liquefaction, transportation, and regasification of liquefied natural gas (LNG); transporting crude oil through major foreign oil export pipelines; transporting, storing, and selling natural gas; and a gas-to-liquids facility. CVX engages in exploration and development operations in a number of large hydrocarbon basins around the world. CVX is currently drilling ten exploratory wells to search and develop crude oil and natural gas in order to increase its resources. The acquisition of Noble Energy in FY'20 increased CVX's year-end proven oil and gas reserves by ~18%. Noble Energy's Eastern Mediterranean offshore reserves added to CVX's upstream portfolio.

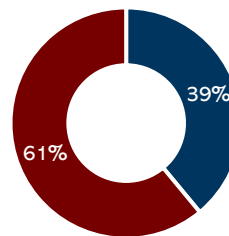
- CVX has been active in lowering its carbon footprint in the upstream segment. They have invested ~\$1bn in carbon sequestration. CVX has implemented renewable energy through partnerships such as solar panels that generate ~500MW renewable power, the Company's methane emissions have reduced ~85% from US onshore operations since 2013 and has committed to zero routine flaring by FY'30.
- **Extraction:** CVX's extraction of oil and natural gas from shales and deep-water regions has raised concerns for the Company; it has developed a strategy where it simultaneously drills series of horizontal wells to mitigate its concerns. This is achieved by hydraulic fracturing, also known as "fracking," which involves pumping pressurized liquid into deep-rock formations to produce cracks that enable petroleum and natural gas to flow freely. The Company's deep-water programs seek to extract oil from the ocean floor. CVX is a global leader in deep-water oil production due to the use of emerging technology to address operating challenges.
- **Gas-to-liquids:** Since liquid natural gas is cheaper to ship, the Company employs Gas-to-Liquid's technologies, which converts natural gas into liquid petroleum gas and clean-burning diesel fuel. CVX supplies natural gas and natural gas liquids (NGLs) to economies all around the world by contractual agreements. CVX has started the Gorgon Project, a domestic natural gas plant capable of generating ~2.3 bcf/d of natural gas, to improve its market position and help satisfy potential energy demands.
 - U.S. and international sales of NGLs averaged 233 kb/d and 120 kb/d respectively, in 2020.
 - From 2021 to 2023, CVX has a contractual agreement to supply 1,136 bcf of natural gas to third parties in the United States. CVX claims it will meet these expectations by combining its proved developed U.S. assets with third-party purchases. The majority of these commitments are focused on contracts with indexed pricing terms.
 - Outside of the United States, CVX has contractually agreed to deliver a total of 2,800 bcf of natural gas to third parties from projects in Australia and Israel from 2021 and 2023. The Australia sales contracts contain variable pricing models that generally reference the present market price for crude oil, natural gas, or other petroleum products at the time of delivery. The Israel sales contracts have formulas that typically represent an initial base price that is subject to price indexation over the duration of the deal, whether Brent-linked or not, as well as a contractual floor (the lowest acceptable limit by CVX and partnering Companies).

CVX FY'20 Super-region Segment Breakdown



■ Africa and Middle East ■ Americas ■ Asia/ Pacific ■ Europe
 Source: FactSet

CVX FY'20 Geographic Segment Breakdown



■ United States ■ International
 Source: FactSet

INDUSTRY OVERVIEW

Natural Gas: The New Liquid Gold

The liquified natural gas industry has seen major growth over the past five years. In places where pipelines are not accessible or logical, LNG has provided a solution for reaching, extracting, and transporting natural gas. By cooling the gas to ~-260 degrees Fahrenheit, companies can convert it into a liquid state for shipping and storage. The volume of LNG is 600x smaller than natural gas in its gaseous state, so it is much easier to transport. LNG can also be used as a transport fuel for ships, trucks, and buses as well as an electricity generator at power plants at times of high energy demand, making it a highly versatile product. Many new markets will emerge onto the existing users, thus growing the already international LNG industry. In 2004, LNG accounted for just 7% of the world's natural gas demand, but as of 2019, it accounted for ~38% according to the IEA. The demand for LNG around the world is projected to increase as the capacity to transport it and store it grows.

A Danger-Free Zone

Given the global shift toward safer and cleaner energy, communities around the world will consider LNG the option for a greener tomorrow. The EIA attributes low carbon dioxide emissions in the US to the increased use of natural gas, the safest fossil fuel. Other fossil fuels have much higher emissions than natural gas, and with the world becoming increasingly concerned about the environment, LNG can take its place alongside renewables as the new sources of energy of the future.

- According to the EIA, when it is burned natural gas produces ~117 pounds of carbon dioxide per MMBtu, which is over 80 pounds less than when coal is burned and over 40 pounds less than when distillate fuel oil is burned.
- The transportation of LNG is also strictly regulated by local, state, and federal authorities such as the Federal Energy Regulatory Commission (FERC) and the U.S. Coast Guard. The ships used to export the LNG are extremely sophisticated and have built-in leak detection and shutdown systems, so nothing gets out.

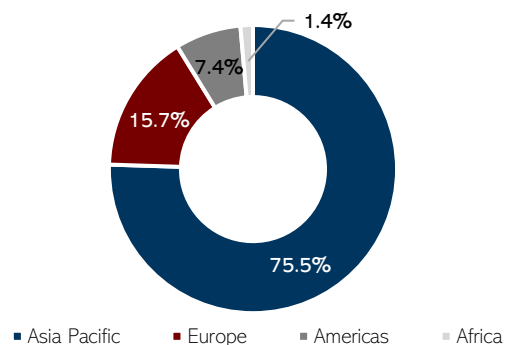
Safety is not and should not be an issue going forward with LNG. The current prevalence of LNG in the market establishes its role as the safest, most efficient, and most clean source of energy going forward as societies increase their environmental awareness and sustainability. There are no concerns about LNG's long-term relevance, so those who are already involved will have a big advantage over the rest of the industry moving forward.

LNG: Who Wants It?

LNG is the main driver of international gas trade and that trend is expected to continue according to IEA, as additional investments in liquefaction plants and tankers will provide even greater export capacity in North America, Africa, and Russia. Australia as well as China, India, and other emerging markets in the Asia Pacific region are expected to account for the largest amount of growth in LNG over the coming years. The demand for LNG is likely to increase going forward. Australia has the most operating capacity for LNG, but Qatar and the US are close behind and expected to pass Australia in the coming years.

- According to McKinsey and Co., LNG demand is expected to grow ~3.4% per year through 2035, and ~0.5% per year from 2035-2050. This growth is being attributed to the lack of supply being able to keep up with the expected growths in global demand. In comparison, oil is expected to peak in 2035, showing what the projected fossil fuel of the future is.

LNG Demand by Region (2020)



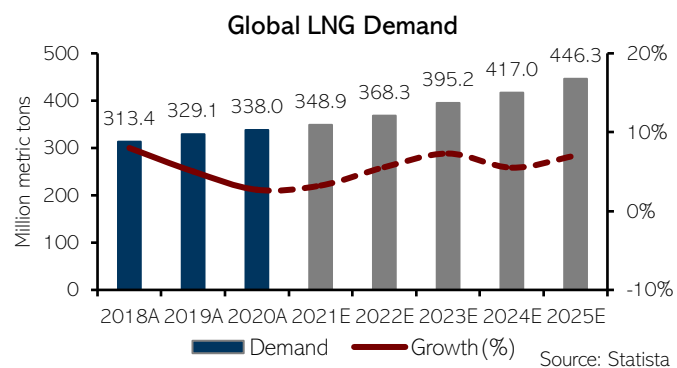
Source: Statista

- Asia is expected to drive the growth of LNG through 2050, but it won't be the same country the whole time. China is expected to be the main driver of LNG growth through 2035, but that is expected to shift to the South and Southeast of Asia until 2050. In the shorter term, the demand for LNG in the Asia Pacific region is expected to increase by ~70% over the next year.
- There is currently 178 MT of LNG export capacity being constructed across the world right now. In order to keep up with the growing demand for LNG, it is expected that there will need to be ~200 MT of additional capacity by 2050 to keep up with demand. The United States is expected to be at the forefront of these construction projects.
- According to IEA, natural gas demand is expected to increase by 3% in 2021, a 2% increase from 2020, as many markets are still recovering from COVID-19. There are expected to be faster recoveries in emerging markets such as Asia, Africa, and the Middle East, but a more gradual recovery is expected by markets such as the US, which may not return to pre-pandemic levels until at least 2022.

Welcome to the Majors: Integrated Oil

Integrated oil majors have played a big role in the increased supply and capacity of LNG and natural gas as a whole. From the construction of liquefaction and regasification plants to the fleets of tankers used to transport LNG across the globe, these integrated oil companies play a role in every aspect of the process.

- Integrated oil companies have also had a major role in the growth of demand in the Asia Pacific. Since the companies have multiple sources of gas to choose from, they have sent a majority of its extra tankers to Asia to take advantage of the growing market and make it the world's hot spot for importing LNG.



Another major factor that integrated oil majors will play in securing the future of LNG is its net-zero-emissions targets. As many of the companies begin to look at reducing carbon emissions in the short term, they have to look no further than expanding its LNG segments. As previously mentioned, natural gas is much safer when burned than other fossil fuels and is the best option for these companies that do not want to transition into a completely renewable space.

COVID-19 Side Effects

The COVID-19 pandemic was not easy on the energy sector by any means, but it could have been worse. Gas demand dropped by just 3% in 2020, while LNG demand still grew by 1%. Short-term demand was impacted the worst for energy by COVID-19, but for natural gas and LNG, mid-term and long-term demand remained mostly untouched and provide reason to be optimistic about the future. Due to the pandemic, many companies were forced to accelerate plans to diversify within the energy segment, which may end up benefiting LNG capacity and demand.

Oil Roots

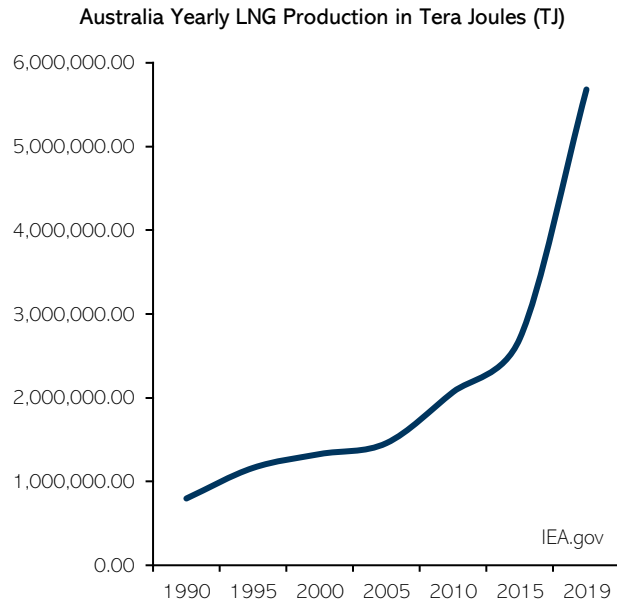
Despite having a tough year in 2020, oil is making a comeback. Although oil demand took a big hit because of COVID-19, production cuts by OPEC+ have allowed prices to return and even exceed pre-pandemic levels. 2021 is expected to be a balanced year for oil, as according to the EIA, inventories are expected to fall in early 2021 but rebound in the second half. According to Bloomberg, oil demand is projected to grow until it peaks in 2035. As more integrated oil majors move more into the LNG industry and other clean energies more market share will become available in oil. U.S. majors like Chevron are more likely to make the carbon play than some European majors such as BP or Shell, who are feeling the pressure and moving to cleaner alternatives sooner than the rest.

CATALYSTS & DRIVERS

Potential in Down Under

From 2011- 2019, 121 coal fired power plants were repurposed, 103 of those were completely turned into natural gas fired plants. With Global Warming becoming an increasing problem, economies are looking for cleaner ways to power its markets, and LNG seems to be the best substitute. Not only is LNG a greener source of energy than traditional coal or oil, but it is also cheaper to produce and cheaper to buy than oil. The growth for CVX lies in its positioning in Australia. CVX currently operates two massive LNG facilities, Gorgon and Wheatstone, both located in Western Australia. These facilities were finished and became fully functional in 2018 and are currently the leading provider of LNG in the Australian Pacific Region.

- CVX is currently the biggest LNG producer in Australia, making up about 50% of total production. Looking at the chart, around 2018, LNG production in Australia exploded. According to the IEA, Australia is projected to be the biggest LNG provider in the world.
- During the pandemic, demand for energy plummeted. Since CVX is an energy company that is very cyclical, its production also nose-dived. Over the course of past year, CVX's infrastructure was extremely underutilized. Gorgon is capable of producing roughly 2.3 bcf/d. Unfortunately, that number was not even close to touched due to the decrease in demand. However, seeming that we are emerging out of the pandemic, we expect to see a significant rebound in demand.
- The IEA expects that Australia's demand for LNG will increase at ~4% CAGR between 2021 and 2026. One big ticket project that CVX has coming up in 2021 is a contract to supply an Australian third party with 2,800bn cubic feet of natural gas via pipelines.



Not only is Australia going to be a significant role in CVX's future success, but Asia also seems to be increasing its demand for LNG as well. Looking long term, Business-Standard and Livemint estimate that between 2021 and 2040, Asia will drive 75% of all LNG demand. Being that Asia is such a big continent that contains many populated cities, demand for cleaner sources is rising quickly in the short-term horizon as well. This works out very well for CVX because of the significant amount of assets the Company owns all over Asia.

- CVX owns and operates many LNG facilities all throughout Asia ranging from China, Thailand, the Philippians, and Indonesia. According to the IEA, Asia's imports are going to increase by ~15% between 2021 and 2030. In June of 2020, CVX acquired a network of terminals and pipelines throughout Asia to capitalize on this massive growth. Utilizing its current assets throughout Asia and using the newly acquired terminals and pipelines will allow CVX to become a very dominant supplier in Asia.

Looking at the past year as a whole, CVX set itself up to take advantage of the big boom that is about to happen with the demand for LNG. Having both Gorgon and Wheatstone fully utilized to support the upcoming global demand, as well as taking advantage of LNG assets all around Asia to be fully utilized for the exponential increase in demand for LNG is expecting CVX to grow its revenue by ~50% by 2022. Taking all of these into account we believe that CVX will be able to capitalize on this upcoming global LNG boom.

Committing to Efficient Investments

In addition to its involvement with LNG projects in the Australia and Asia-Pacific regions, CVX is pursuing opportunities that will expand its top-line growth and help it harness the demand rebound for petrochemical products. Oil prices are already above CVX's dividend breakeven of \$48 according to JPM and are likely to increase as vaccine distribution continues and pandemic restrictions are lifted. The average global consumption of liquid fuels and petroleum in 2021 is forecasted to reach 97.7 mmb/d, beating 2020's average by 5.5 mmb/d. While some investors are hesitant to invest in petrochemicals in anticipation of a global transition to renewable energy, new oil and gas exploration remains necessary in meeting future energy demand. According to a report by McKinsey, exploration and production companies need to add 38 mmb/d of new crude production to meet demand by 2040, even in an accelerated energy-transition scenario. In 2021, CVX announced its determination to improve capital efficiency by investing in only the highest-return projects and increasing activity in their most attractive long-term assets, such as the Permian Basin. By expanding infrastructure in areas with positive long-term outlooks and petrochemical resources, CVX positions itself to capitalize off of near-term energy trends and the carbon rebound.

Permian Basin

- CVX is one of the largest oil and natural gas producers in the Permian Basin, with current holdings already totaling ~2.2mm acres. The Company uses the Permian's unique geology of stacked rock layers to its advantage, having developed a factory model that allows the drilling of a series of horizontal wells at the same time. CVX's implementation of this model has lowered costs and tripled the pace of its drilling program.
- 85% of the Company's leases in the basin have either no or low royalty payments, offering CVX a higher rate of return. This gives CVX a competitive advantage over those in its peer group, who pay 20-25% in production royalties. CVX avoids payment of these royalties due to its longstanding ownership of the mineral rights for much of the land it operates on, while its rivals that don't possess the rights must pay minerals owners.
- Oil production in the basin is capable of growing 5% per year, with thousands of potential well locations at companies' disposal. CVX is eager to ramp up investment in the area. Management recently stated the Company's intent to pump 1 mmb/d in the Permian to reverse the pandemic-driven decline in production and forecasted that CVX's wells in the basin will generate \$3 bn in FCF by 2025. The wealth of growth opportunities within the Permian as well as CVX's established competitive advantages there make it a crucial asset for the Company during the carbon rebound, and future investments in the area will only strengthen this position.

U.S. Gulf of Mexico

- In addition to the Permian Basin, CVX is looked to boost its activity in its holdings at the U.S. Gulf of Mexico, where it has long been one of the top leaseholders. Some of its most productive natural gas projects operate at the Gulf and its Jack and St. Malo fields alone produce 22mcf/d.
- One of CVX's recent projects at the gulf is the development of a production facility at the newly discovered Ballymore Field. The oil field is located just 3 miles away from one of CVX's existing fields and is the largest company discovery in the gulf to date. Ballymore's size, quality, and proximity to CVX's existing infrastructure makes it an important addition to the Company's portfolio. Since near-term energy trends indicate higher demand for oil and gas, assets like Ballymore ensure that the Company is ready to provide adequate supply.

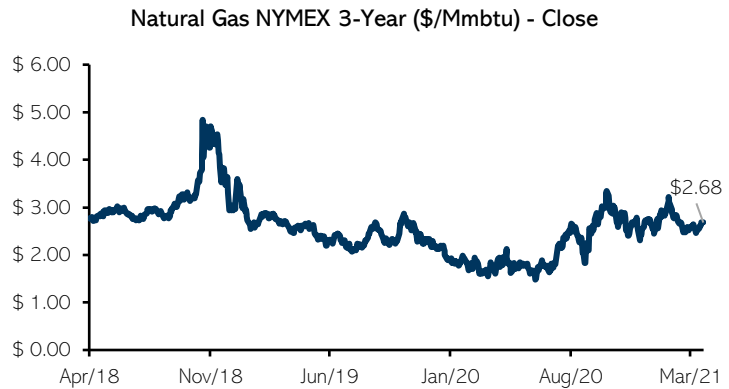
Noble Energy Acquisition.

- CVX's 2020 acquisition of Noble Energy was the first big energy deal since the pandemic-driven crash in the oil market. Noble's proved reserves and resources complement CVX's upstream portfolio, including a holding of 92,000 acres in the Permian that are already conveniently adjacent to the Company's own.
- Further U.S. onshore resources gained from the acquisition include Noble's assets in Colorado's Denver-Julesburg (DJ) Basin. CVX plans to develop the DJ Basin's drilling infrastructure further on the 336,000 acres it now possesses. The Company is prepared to leverage its factory-model approach to drilling at the basin in order to generate a higher peak production rate compared to wells from rival operators.

RISKS TO INVESTMENT THESIS

Fluctuations in the LNG Market

Within the LNG industry, the tenders of CVX's peers have been canceled due to recent spot market fluctuations around the world. Customers have recently been affected by prices sold at uneconomical rates. Hedging and managing long-term price risk have become more complicated and demanding aspects of project execution due to the evolving price setting. This could impact CVX's costs and revenues. The initial volumes of natural gas available to LNG facilities may be impacted by unexpected in-country cost increases in upstream exploration and completion, facility, pipeline, or transportation. Demand from "traditional" LNG customers is based on supply and demand predictions, which are inherently unpredictable, as evidenced by the current LNG supply glut in the industry.



Source: FactSet

Demand from "traditional" LNG customers is based on supply and demand predictions, which are inherently unpredictable, as evidenced by the current LNG supply glut in the industry.

Dependence on Oil Demand

Global oil markets are trying to rebalance after the pandemic-induced collapse in demand. Though the inventory surplus from last year is being worked off, there is still the potential risk of oil prices failing to rise to CVX's expectations. The IEA has predicted a global oil demand growth of 5.95 mm b/d in 2021, but if demand ends up growing slower than expected, or supply comes onto the market too fast, oil prices could decrease once more.

Trouble with Transportation

LNG cargoes' versatility and capacity to be redirected in response to price signals have enabled the gas market to become more integrated. According to Charif Souki, Chairman of US LNG developer Tellurian Inc., buyers are "never really far from a cargo" and that in the next two years, about 20 cargoes will be available on the spot market per day, equating to about 5,000 cargoes per year. However, the increase in trading logistics leads to increased risk exposure. It could affect the Company's operating expenses, raw materials processing costs, and other deductions that affect the bottom-line, as a major producer CVX must explore alternate shipping and storage options to reduce its risks. Natural or human factors beyond the Company's control may interrupt operations. CVX does not carry insurance to cover any future risks, putting it at risk of substantial financial loss. The Company has no commercial insurance or third-party indemnities in place to fully offset any operating costs or probable liabilities in the case of a major incident or series of incidents resulting in catastrophic loss. The increase in transportation will lead to greater risks for the Company. As a result, the corporation is self-insured for such accidents to a large degree.

More Policies, More Problems

In January, the Biden administration ordered a moratorium on new oil and gas leases on federal land, including an indefinite cancellation of all federal lease sales in the Gulf of Mexico. This poses a potential risk to CVX, who has been a notable participant at the twice-yearly lease sales of deep-water blocks hosted by the federal government at the Gulf. Several of CVX's large oil and gas producing platforms are located there, such as its St. Malo and Tahiti fields. While the administration has so far generally signaled that companies' existing leases are secure, new proposals by the administration's officials could put this in jeopardy. In 4Q'20, 25% of CVX's natural gas production and 45% of its crude oil production occurred within U.S. lands and waters. There are also several exploration prospects and undeveloped discoveries that the Company aims to take advantage of in the Gulf. As details of the administration's onshore leasing policies and offshore auctions have yet to be released, CVX must deal with the uncertainty of whether the U.S. remains a viable option for investing in future projects.

UNDERVALUATION & THESIS

CVX is currently trading at an NTM EV/EBITDA one-year average multiple of 6.9x, which represents a ~12.2% discount to its one-year average of 7.7x. Just like all other industries, CVX was negatively impacted by COVID-19, specifically due to the significant decrease in demand for energy products, like oil or LNG. But we believe that due to CVX's strong LNG positioning in Australia for the upcoming boom in LNG demand, as well as the acquisition of Noble energy, which pairs perfectly for the rebounding demand for oil, we believe CVX will go back to and rise above its historical average.

- CVX's weakest performance was in 4Q'20, After increasing production by 6.5% due to the demand recovery in 4Q'20. CVX's multiple started to rebound. Another factor that negatively affected earnings in 4Q'20 was the acquisition of Noble Energy. Although this was good for CVX because it will allow the Company to have a strategic advantage with oil demand rising, it negatively affected the balance sheet as it decreased cash at a bad time given the demand drop-off.
- Furthermore, in 4Q'20, there was a 17% decrease in refinery crude oil input. This is the difference between the value of crude oil (inputs) and the value of petroleum (outputs). This was mainly due to the reduction in demand of petroleum products from the pandemic. In 2Q'20, CVX acquired PUMA energy holdings in Australia. Since PUMA produces extremely good quality diesel fuel compared to competitors, this allowed CVX to capitalize on the growing demand for diesel.
- To combat the uncertainty and unpredictability during these rough times, CVX implemented a cost reduction plan was enacted in April that would attempt to reduce costs across the entire Company. One of the biggest cost reductions was in CapEx, reducing by 35%, amounting to ~\$1.4bn. This helped CVX's Free Cash Flow a lot and allowed the Company to allocate the cash elsewhere, like dividend payments. CVX raised its dividend payout ratio in FY' 20, increasing its quarterly dividend by 300%. In addition to CapEx, operating expenses were reduced by 10%.
- We believe that a majority of CVX's growth will come from its LNG segment. Being that LNG is a much cleaner way to power economies, the IEA predicts that the global demand will increase by ~7.5% between 2021 and 2026. In Australia, LNG demand decreased in 2020, but is expected to grow by ~4% annually according to Reuters. Taking into account the continual growth in demand that Australia is expected to see, we believe that CVX will be able to capitalize on this and become a leading LNG supplier for years to come. Looking at the Company's financials, CVX has the best balance sheet compared to other competitors within the industry. Mainly looking at dividend breakeven, which essentially means the value at which brent oil can be and the firm will breakeven. CVX's dividend breakeven is \$48 which is lower than US Competitors.

CVX One-Year Average NTM EV/EBITDA



PRIMARY PEER GROUP ANALYSIS

ExxonMobil

Exxon Mobil Corporation (XOM) was founded in 1882 and today the Company explores, develops, and distributes oil, gas, and petroleum products. The Irving, TX-based company operates in three business segments: Downstream (78.9% of FY'20 Revenue), Chemical (12.9%), and Upstream (8.1%). Downstream endeavors include the manufacturing and trading of petroleum products with XOM having a notable presence in the Americas, Europe, and the expanding Asia-Pacific region. Chemical operations offer petrochemicals aimed at supporting living standards around the globe. Upstream operations consist of producing crude oil and natural gas, and the Company has recently made strides in upstream-project developments in Guyana and the Permian basin.



Royal Dutch Shell p.l.c. Class A (RDSA-GB) came to life in February 1907 and is currently located in the Netherlands. The Company operates in the five business segments of Oil Products (71.3% of FY'20 Revenue), Integrated Gas (18.4%), Chemicals (6.5%), Upstream (3.7%), and Corporate (0.1%). The Integrated Gas segment of RDSA-GB's operations consists of the liquefaction of natural gas and other activities. The Upstream segment conducts the exploration and extraction of crude oil, natural gas, and natural gas liquids. Oil Products consist of the refining, trading, and marketing of oil-related products. The Chemicals segment envelopes the operation of manufacturing plants and the Company's marketing network.



PetroChina Co. Ltd. Class H (857-HK) has served as a major player in the petroleum industry since its founding in 1999. The Beijing-based company operates in five business segments: Marketing (73.5% of FY'19 Revenue); Natural Gas and Pipeline (13.9%); Oil Refining and Chemicals (7.6%); Exploration and Production (4.9%); and Headquarters and Other (0.1%). The Marketing segment handles all trading and marketing for refined products. The Natural Gas and Pipeline segment includes the transmission of crude oil and natural gas as well as sales of natural gas. The Oil Refining and Chemicals segment features products such as crude oil, petroleum products, and other chemicals. The Exploration and Production segment focuses on crude oil and natural gas.



BP p.l.c. (BP-GB) is an integrated oil and gas company that was founded in 1909 by William Knox D'Arcy and is currently headquartered in London. The Company operates in three business segments: Downstream (90.3% of FY'20 Revenue), Upstream (9.5%), and Rosneft (within the other 0.2% of FY'20 Revenue). The Upstream operations include oil and natural gas exploration and production, as well as the storage and marketing of LNG. The Downstream segment focuses on refining, marketing, and trading crude oil and petroleum products to wholesale and retail customers.



Conoco Phillips (COP) is an international upstream company that operates out of Houston, Texas. Before merging in 2002, the Company was formerly Conoco Inc. and Phillips Petroleum Company. Conoco Phillips generates revenue through the activities of exploration, production, transportation, and marketing of crude oil, natural gas, and LNG and NGLs. COP conducts business in five larger geographical segments: Lower 48 (52.3% of FY'20 Revenue); Alaska (18.1%); Asia Pacific (12.6%); Europe, Middle East, and North Africa (10.2%); and Canada (6.7%). The Company acquired Concho Resources Inc. for \$13.1 bn which has refocused the Company's exploration program and has led to COP's decreased interest in Colombia and withdrawal from Chile.



Primary Peer Group

Ticker	Market Cap	Enterprise Value	Enterprise Value /														
			Sales		EPS		EBITDA Margin		Profit Margin		EBITDA		Sales		Price / Earnings		
			LTM	2021E	LTM	2021E	LTM	2021E	LTM	2021E	LTM	2021E	LTM	2021E	LTM	2021E	
Chevron Corp	CVX	\$199,091	\$242,723	(32.5)%	3.0%	(103.3)%	(28.7)%	9.3%	9.3%	(5.9)%	7.4%	7.0x	6.5x	1.7x	1.7x	19.0x	16.3x
ConocoPhillips	COP	68,811	78,365	(42.3)%	36.4%	(127.0)%	800.0%	18.4%	44.2%	(14.4)%	11.5%	5.4x	5.0x	2.2x	2.1x	19.4x	16.4x
BP plc	BP	85,834	150,197	(35.2)%	1.6%	(157.1)%	-	1.6%	12.4%	(11.3)%	3.1%	5.0x	4.6x	0.6x	0.6x	10.3x	8.6x
Royal Dutch Shell	RDSA	106,838	228,797	(47.7)%	(4.6)%	(69.6)%	5.9%	14.9%	17.3%	(12.0)%	5.1%	4.7x	4.4x	0.8x	0.8x	10.1x	8.2x
PetroChina CO. Ltd.	PTR	114,443	1,267,028	(23.2)%	7.1%	(56.6)%	168.0%	12.4%	14.3%	1.0%	2.2%	3.1x	3.3x	0.5x	0.5x	11.9x	13.1x
Exxon Mobil Corp.	XOM	239,109	314,531	(30.1)%	3.4%	(114.7)%	11.1%	8.6%	16.5%	(12.6)%	5.4%	7.4x	6.7x	1.3x	1.2x	17.6x	14.0x
High		\$239,109	\$1,267,028	(23.2)%	36.4%	(56.6)%	800.0%	18.4%	44.2%	1.0%	11.5%	7.4x	6.7x	2.2x	2.1x	19.4x	16.4x
Mean		123,007	407,784	(35.7)%	8.8%	(105.0)%	246.3%	11.2%	20.9%	(9.8)%	5.5%	5.1	4.8x	1.1x	1.0x	13.9x	12.0x
Median		106,838	228,797	(35.2)%	3.4%	(114.7)%	89.6%	12.4%	16.5%	(12.0)%	5.1%	5.0	4.6x	0.8x	0.8x	11.9x	13.1x
Low		68,811	78,365	(47.7)%	(4.6)%	(157.1)%	11.1%	1.6%	12.4%	(14.4)%	2.2%	3.1	3.3x	0.5x	0.5x	10.1x	8.2x

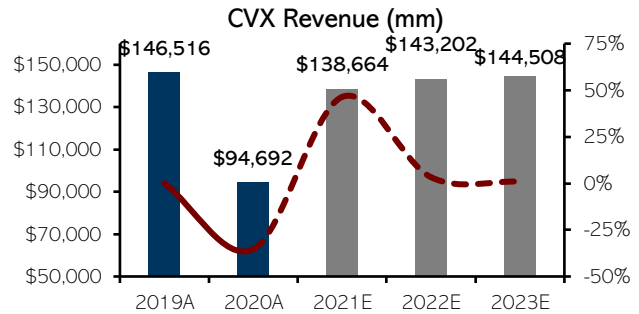
Company	General Statistics				Returns Analysis			2020A Leverage Analysis			2020A Coverage Analysis			Liquidity Profile		Credit Profile	
	Ticker	Tax Rate	Beta	Dividend Yield	ROIC	ROE	ROA	Total Debt /			EBITDA / Int. Exp.	(EBITDA - Capex)/Int.	EBIT / Int. Exp.	Quick Ratio	Current Ratio	Moody's	S&P
								Cap	EBITDA	Equity							
Chevron Corp	CVX	25.4%	1.18	5.0%	(1.9)%	(4.0)%	(2.3)%	0.3x	3.0x	0.4x	21.7x	9.6x	(8.3x)	0.77	1.18	Aa2	AA-
ConocoPhillips	COP	(6.2)%	1.14	3.4%	(4.4)%	(8.3)%	(4.1)%	0.4x	4.6x	0.5x	4.1x	(1.4x)	(2.7x)	1.72	2.25	A3	A-
BP plc	BP	17.0%	1.17	4.9%	(10.3)%	(23.9)%	(7.2)%	0.5x	-	1.0x	(2.8x)	(7.7x)	(8.8x)	0.75	1.22	A2	A-
Royal Dutch Shell	RDSA	-	1.33	3.4%	(7.1)%	(12.7)%	(5.5)%	0.4x	4.0x	0.7x	6.2x	2.4x	(5.9x)	0.73	1.23	Aa2	A+
PetroChina CO. Ltd.	PTR	40.3%	0.78	6.4%	1.1%	1.6%	0.7%	0.3x	2.2x	0.4x	8.5x	(0.9x)	1.4x	0.34	0.80	-	-
Exxon Mobil Corp.	XOM	17.0%	1.09	6.2%	(877.6)%	(1,286.7)%	(645.4)%	30.7x	4.3x	44.4x	9.3x	(0.2x)	(16.8x)	0.44	0.80	Aa2	AA-
High		40.3%	1.33	6.4%	1.1%	1.6%	0.7%	30.7x	4.6x	44.4x	9.3x	2.4x	1.4x	1.72	2.25		
Mean		17.0%	1.10	4.9%	(179.7)%	(266.0)%	(132.3)%	6.4x	3.8x	9.4x	5.0x	(1.6x)	(6.6x)	0.80	1.26		
Median		17.0%	1.14	4.9%	(7.1)%	(12.7)%	(5.5)%	0.4x	4.2x	0.7x	6.2x	(0.9x)	(5.9x)	0.73	1.22		
Low		(6.2)%	0.78	3.4%	(877.6)%	(1,286.7)%	(645.4)%	0.3x	2.2x	0.4x	(2.8x)	(7.7x)	(16.8x)	0.34	0.80		

FINANCIAL ANALYSIS

Revenue

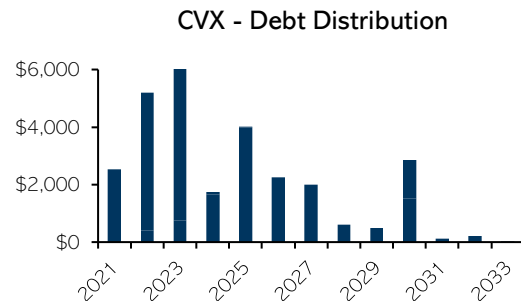
In FY'20, CVX generated \$94.7bn in revenue, a 35.4% YoY decrease. This fall in revenue was caused by both low margins in the oil industry and decreased demand because of the COVID-19 pandemic. Many economies began to close down beginning in March and have yet to fully reopen.

- Both of CVX's business segments saw decreases in revenue in FY'20. CVX's largest segment, Downstream, saw a 36.9% YoY decrease which was caused by a lack of demand for petroleum products. The Upstream segment saw a 17.0% YoY decrease in revenue. The decrease in Upstream revenue is attributed to decreased spending and the pausing of projects.
- There was 4Q'20 revenue of \$25.2bn (-30.6% YoY). This was an increase to both the 2Q'20 and 3Q'20 revenue but was still ~20% lower than 1Q'20 revenue. Economies began to slightly open up more compared to the middle of the year, which benefitted sales but was not enough to reach pre-pandemic levels.
- FY'21 has expected revenue of \$143.2bn which is a 46.4% YoY increase. Drivers of this expected growth are increased oil demand caused by production cuts by OPEC+, as well as economies across the world beginning to open up. The revenue growth is expected to continue through the end of FY'23.



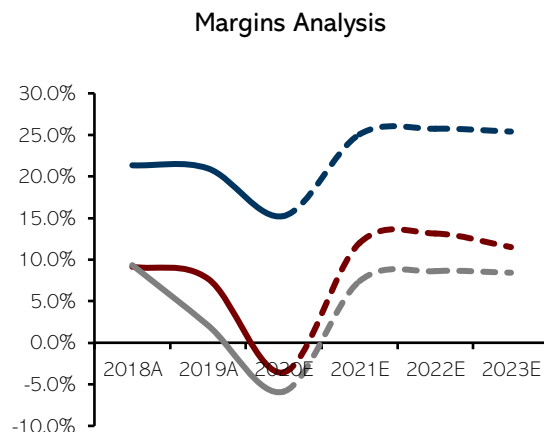
Debt

- As of FY'20, CVX holds ~\$38.7bn of net debt. Before significantly increasing the dividend and resuming share buybacks, the management has made it known that they want to reduce net debt to \$31bn.
- Street estimates project CVX to reach its \$31bn net debt target between 2H'21 and 4Q'22, laying the foundation for substantial dividend growth in FY'22 and beyond.



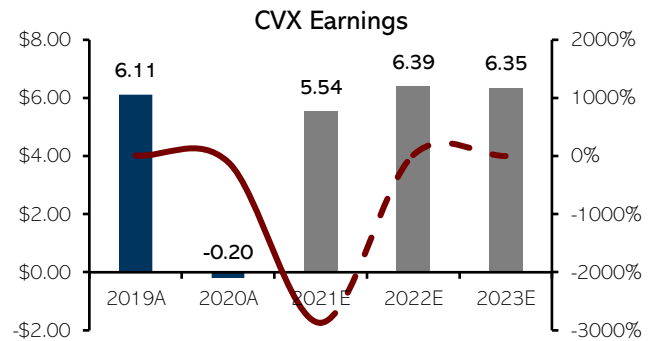
Margin

- In FY'20, CVX wrote off ~\$18bn in depreciation and amortization expenses, distorting its EBITDA margin for FY'20. For reference, that year alone totals roughly the same or greater the number of total write-offs in FY'19 and FY'18, which equate to \$18bn and \$19bn, respectively.
- Moreover, steep revenue declines in 4Q'19 and 2Q'20 drove EBIT and profits values in the negatives, resulting in a sub-zero margin. Despite the top-line being hindered by the lack of demand, both EBIT and profit margins recovered to a great extent in 3Q'20.
- CVX's margins were negative at the end of FY'20. However, due to the recovery in FY'21, we expect EBITDA, EBIT, and profits margins to stabilize. We expect the margins to reach back to its pre-pandemic levels with where EBITDA, EBIT, and Profit margins are at 25.7%, 13.1%, and 8.6% in FY'22.



Earnings

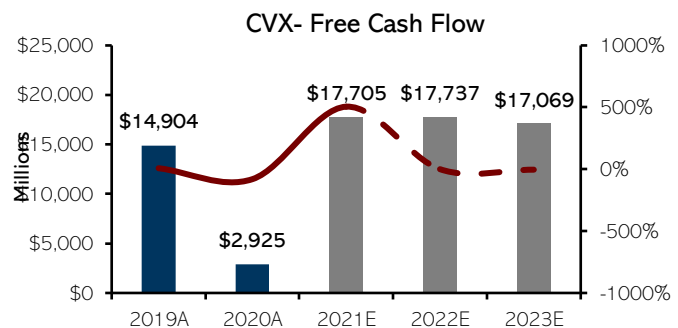
- In 2019, the demand for oil products was very high. CVX was performing very well in terms of revenue and production.
- One of the major factors that play into earnings is the price of crude and Brent oil, as well as demand for oil products. In 2020, both demand and prices were next to zero. This really impacted CVX's downstream operations since selling oil could not be done at higher prices which negatively impacted earnings significantly, reducing EPS in FY'20 by -2,870%.



- Future EPS are expected to grow by significant amounts compared to FY'20 (15.3 in FY'21) mainly because of the oil rebound that the world will see as we move out of this pandemic. As economies slowly reopen, oil prices, as we have seen already, are going to start rising which will allow CVX to increase earnings, growing revenue by over 50% by FY'22. In addition to oil, demand for LNG will be increasing by a CARG of 4% in Australia, and 15% by 2030 in Asia, which will be a big part of CVX's success.

Cash Flow/CapEx

- The pandemic led to the generation of very little FCF during FY'20 after the industry-wide collapse in oil and gas prices. As the demand for these products starts to rebound, we expect CVX to once again generate strong FCF.



- The Company plans to cut operating costs by 10% and its budget for CapEx spending by 13% in FY'21. While CVX has maintained the strongest balance sheet amongst its peers, it believes that cost reduction initiatives are a necessary response to the possibility of lower commodity prices through 2025. Lower fuel and incentive compensation costs will help CVX exceed its guidance for operating cost savings. If the Company's cost cutting program is executed successfully, its return on capital employed is expected to double, and its FCF is predicted to expand at an annual growth rate of 10% through 2025.

- CVX expects to announce the details for the resumption of its share repurchase program later in the year. We believe that they are wisely waiting for global supply and demand levels to return to pre-pandemic status and for OPEC+ to allow its shut-in crude products back into the market. While the exact declaration date and dollar value of share repurchases will likely be given closer to the end of FY'21, estimates show that the Company's excess cash will be used to repurchase \$2bn in shares in 2022 and \$3bn in 2023, driving up CVX's EPS.
- CVX's annual dividend of \$5.16/share is almost double its value from 10 years ago, making it one of the energy sector's best dividend paying socks. With cost-cutting initiatives and restriction of CapEx spending combined with stronger oil and gas prices, the Company is prepared to continue its track record of increasing its dividend.
- CVX's Net Debt to EBITDA ratio for FY'20 was 2.9 and has a ratio of 1.8 for its 5Y average. This indicates that the firm has high probability for successfully paying off its debt. Moreover, moving forward the Company is expected to generate FCF more than its pre pandemic level, due to which we anticipate additional debt paydown in the FY'22 and FY'23.

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