

University of Mississippi

eGrove

Honors Theses

Honors College (Sally McDonnell Barksdale
Honors College)

5-13-2023

Analysis of Financial Accounting Principles through Case Studies

Mary Lauren Crane

Follow this and additional works at: https://egrove.olemiss.edu/hon_thesis



Part of the [Accounting Commons](#)

Recommended Citation

Crane, Mary Lauren, "Analysis of Financial Accounting Principles through Case Studies" (2023). *Honors Theses*. 2827.

https://egrove.olemiss.edu/hon_thesis/2827

This Undergraduate Thesis is brought to you for free and open access by the Honors College (Sally McDonnell Barksdale Honors College) at eGrove. It has been accepted for inclusion in Honors Theses by an authorized administrator of eGrove. For more information, please contact egrove@olemiss.edu.

Analysis of Financial Accounting Principles through Case Studies

by

Mary Lauren Crane

A thesis submitted to the faculty of The University of Mississippi in partial fulfillment of the requirements of the Sally McDonnell Barksdale Honors College.

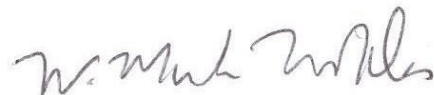
Oxford, Mississippi

May 2023

Approved by



Advisor: Dr. Victoria Dickinson



Reader: Dr. Mark Wilder

© 2023
Mary Lauren Crane
ALL RIGHTS RESERVED

ABSTRACT

MARY LAUREN CRANE: Analysis of Financial Accounting Principles through Case Studies
(Under the Direction of Victoria Dickinson)

This thesis is a compilation of ten case studies completed throughout the 2021-2022 academic year under the direction of Dr. Victoria Dickinson. The first five cases look at various aspects of the accounting world and profession ranging from the effects of COVID-19 on the market to researching a potential location in which to start an accounting career. The latter half of the cases involve an in-depth study of ExxonMobil as a company and the accounting risks associated with it.

TABLE OF CONTENTS

Case 1: 102 Minutes that Changed America.....	1
Case 2: Design Your Life.....	8
Case 3: Excel Crash Course – Spreadsheet Formulas for Finance.....	26
Case 4: Financial Impact of COVID-19 on Pfizer.....	28
Case 5: Interview.....	36
Case 6: ExxonMobil - Overview.....	42
Case 7: ExxonMobil – Audit.....	49
Case 8: ExxonMobil – Tax.....	55
Case 9: ExxonMobil – Advisory.....	61
Case 10: ExxonMobil - Risk Assessment.....	67
List of References.....	73

Case 1: 102 Minutes that Changed America

By: Mary Crane

8 September 2021

Summary

For this case, we were given a few quick facts about the events that occurred on September 11, 2001, and then we watched a YouTube documentary entitled “102 Minutes that Changed America.” While watching the documentary we were supposed to write down things that we saw that stuck out to us and how they made us feel. As accountants, we will be asked to take what is in front of us and make decisions about what we see, so while this was unrelated to accounting, it was a good precursor to what our work will be like.

I thought I already knew a great deal about the events of September 11, but watching this documentary gave me more insight and a new perspective. Prior to this experience, I had watched mainly news reports from that day that presented me with the facts and the aftermath of the attacks. However, the raw, unedited nature of this documentary was different. Being able to hear people’s frantic calls for help and seeing the look of terror on their faces unlocked a new human element for me that I had never actually considered before. This documentary made me realize just how fragile life can be, and it pushed me to think about my own life and relationships. Moving forward, I want to be able to live my life to its fullest extent every day without regrets, and I want the people that I love to know exactly how I feel about them in case a tragedy like this were to ever happen to someone close to me. It is sad that it took something as tragic as the terrorist attack of September 11 to teach me this, but it is a lesson I will carry with me into the rest of my life.

I was only eight months old on September 11, 2001, but I have known about the events of that dreadful day for as long as I can remember. When I was younger, the conversations were more centered around the heroic acts of first responders on that day as well as who the “bad guys” were and why they would want to do such an awful thing to my home, the United States of America. As I have gotten older, it has become more real to me just how horrific that morning was for the people in New York City, those in Washington, D.C., and the citizens of the United States as a whole. Each year on September 11, it is fascinating for me to read and hear about where everyone was and what they were doing when they heard the news that the towers had been struck, and I am even more impressed that most people remember the minute details even twenty years later. I hope and pray that no matter how many years pass, we never stop honoring this day, not only for those that lost their lives and those that lost their loved ones, but for the way that the nation came together in unity in the aftermath. I was too young to feel the sense of pride in being American or to see people of all different backgrounds come together as fellow citizens of America, but I will never grow tired of hearing other people’s stories. This sense of unity among all people in this nation has been so foreign and unachievable for much of my lifetime, so it brings me hope to know that it is in fact possible to put political differences aside and just love one another. For me personally, nothing gives me chills and fills my eyes with tears faster than watching President Bush throw out the first pitch before game three of the World Series in New York City. The game was played just forty-nine days after New York City and the nation had been rocked by unimaginable tragedy, and there was the President, throwing out a perfect first pitch in front of a crowd of proud Americans whose world had just been turned upside down chanting “U-S-A” over and over again. It is a scene that will never get old to me.

With all of that being said, I thought I had a pretty good understanding of the events that took place on September 11, 2001, and all of the emotions and feelings surrounding them. That is until I watched “102 Minutes that Changed America” in class last week. One of the main things that struck me was just how calculated the attacks were. I naively thought that flights were selected without much thought, just whichever would be the quickest and easiest to hop on and hijack. Finding out that the terrorists intentionally chose planes that were set to fly from coast to coast, since they had the most fuel and would burn the longest, made my stomach drop. Simply crashing into towers with thousands of people inside was not enough for these monsters. They wanted to cause as much destruction as possible. I also cannot get the people on these planes out of my mind. They had to have felt so helpless and out of control knowing that they were about to die at the hands of people who did not even know them, yet who wanted so badly to see them and others suffer. Also, one plane crashing into one of the towers was tragic enough, but the terrorists did not stop there. At the time, the people in New York City did not know what had just happened and assumed it was a freak accident. Because of this, the people in the second tower were instructed to stay in place so that there would be less traffic on the ground and so that it would be easier for first responders to get to the first tower to help people evacuate and try to put out the fires. Sure enough, less than twenty minutes after the initial plane crashed into the north tower, a second plane came crashing into the south tower, sending it up in flames immediately. My heart absolutely breaks for those that were trapped in the north tower, but it hurts even more for those that lost their lives because they were not able to get out of the south tower before it was struck. Although the time window between crashes was so small, there was enough time for some people to evacuate had they have known the first crash was not an accident and more trouble was on the way. I also feel for those who made the decision to have people in the south

tower stay and not evacuate. Knowing what we all know now, they are probably full of regret, but there was simply no way for them to know what else the terrorists had in store. If the first crash would have been an accident, the correct call was to have workers in the south tower to stay in place, but unfortunately that was not the case.

Another thing that stuck with me after was watching the documentary was the people that were supposed to be at work in the towers that morning but weren't for one reason or another. Roughly 50,000 people worked in the towers, but on the morning of September 11, only about 19,000 people were inside at work. Just one person dying as a result of these attacks is a tragedy, but this really puts it into perspective that the death toll could have been so much higher if everyone that was normally in the building had shown up to work on time that day. A major reason for people not being at work in the morning was that there was a Mayoral Primary taking place in New York City that day. People's lives were spared because they were exercising their right to vote before going in to work, causing them to be late and not be there at the time of the plane crashes. That is so bizarre for me to think about and process. Similarly, the documentary features a man in the streets that said "Monday Night Football saved my life. I was fifteen minutes away from being in that building." This comment in particular really hit home with me. I am a huge football fan and spend my Saturdays, Sundays, and Monday nights in the fall watching football. However, never once have I thought that watching football was saving my life, because quite frankly it isn't. That was not the case for this man, though. Because he stayed up late watching football the night before, he was running late to work that Tuesday morning and his life was spared. Whether it be voting, watching football the night before, or a plethora of other potential reasons, not being at work by eight thirty on the morning of September 11, 2001, is what saved thousands of more lives from being lost.

A huge focus of the documentary was the mass chaos and panic that broke out in the streets of New York City after the plane crashes and subsequent building collapses. It is a little difficult for me to comprehend since cell phones have been around for most of my life, but twenty years ago when this took place not everyone had a cell phone like they do today. In fact, not many people at all had personal cell phones. This meant there were no news alerts going off on everyone's phones to inform them about what just happened and there was also no way for people to just send a quick text or make a quick phone call to let others know if they were safe or not. The voiceovers of people calling their loved ones from their apartments nearby were relieving to me, but the reality is that not many people were able to do that. Additionally, people were literally able to see the smoke coming up from the towers from their apartment windows but had to go and turn on the news just to know what had caused it. Because of the lack of rapid, widespread information, people were literally running in the streets away from the towers wondering what had just happened. Other people were gathered in Times Square watching it all go down on the television screens. Some people even ran toward the towers, presumably going to search for their loved ones, but were not allowed near them and told to go away in case the towers collapsed. Both of the towers did in fact collapse sending debris and dust with them into the streets. Seeing the cloud of dust come rushing out from the towers and fill every blank space in its path was upsetting. The cloud was so thick that it looked like it was night outside even though it was only ten o'clock in the morning. Almost immediately, everything was covered in a thick layer of dust and it was very difficult for people to see and even harder to breathe. Some people made it out of the towers alive, but struggled heavily trying to escape the dust and smoke. There was really no winning for some people in this situation.

Finally, this documentary gave me an even greater sense of respect for and pride in the first responders that acted that day and in days and weeks that followed. I know I personally would have looked at the two burning towers as too daunting to even attempt to help. Thankfully, these first responders did not do that. Policemen on the ground were doing everything they could to get people out of the area and the firemen risked their own lives by going up in the towers themselves to try to save others that were trapped. I could see the looks on their faces before they went in the towers. They were terrified and probably thinking about their own lives and families in that moment, but they answered the call and performed their duty without question. Those that lost their lives paid the ultimate sacrifice and are the true heroes of this tragic situation.

An image that will stick with me for a long time after watching this documentary is that of people jumping out of the burning towers to their ultimate death. To me, it is the picture of true desperation and hopelessness, and it similar to what we saw just a few weeks ago with people falling off the outside of planes trying to get out of Afghanistan. It is wild to me how these two things are so parallel, and yet they happened almost twenty years apart. In some ways I am proud of how far we have come in all these years, but I am also reminded of how far we have left to go. We as a nation must never forget this day.

Case 2: Design Your Life

By: Mary Crane

6 October 2021

In this case, I was tasked with doing further research on the city in which I plan to start my accounting career. I had to consider general qualities of the city such as topography and climate, but the things that were most important to me were what I would spend my time doing outside of work and how I would be able to live on a starting salary. After researching all of the assigned topics, I feel like Washington, D.C. will present new challenges for me, but they are all challenges I am very excited to experience.

I have visited Washington, D.C. three times in my life, and each time I have thought about how cool it would be to live there one day. However, until this assignment, I had never actually considered what living in such a big city would look like for me. I have always loved politics, so getting to be around the center of our nation's government will be a dream come true for me. Coming from a town of around twenty-five thousand people, the sheer size of Washington, D.C. will be the biggest adjustment for me. I have been able to drive everywhere I need to go in my hometown, but in D.C. I will need to learn how to use the Metro system and other forms of public transportation. The weather will be close to what I am used to with the exception of a colder winter with more snow. Since I will primarily use public transportation, the small amount of snow that D.C. usually gets should not be too difficult to handle. Additionally, the cost of living in D.C. is much higher than anything I have ever experienced, so I will most likely live outside of the city in Virginia or Maryland, depending on where my job is located. More than anything, I am excited to enjoy all that a big city like D.C. has to offer. There is always something going on in the city, and with a professional basketball, baseball, football, and hockey team in the city there will always be a sport for me to watch. I can see D.C. not being the perfect place for me once I want to settle down and start a family, but I am so excited to start my career there.



Washington, D.C

Louis Allen, Jake Ransier, Mary Crane



Geography

While the city itself is mostly flat, the surrounding area is very hilly. There are 3 rivers flowing through the city- the Potomac, the Anacostia, and Rock Creek. DC is about 2-3 hours from the beach. The city is also within an hour of the mountains and there are also hiking trails such as Rock Creek Park within the city.



1. <https://www.10best.com/destinations/district-of-columbia/washington/>
2. <https://dc.curbed.com/maps/hiking-dc-md-va-map>

Climate

Washington experiences hot, humid summers as is common throughout much of the southeast, a mild spring and fall, and cold winters with temperatures typically averaging around freezing from December to February. On average, the city receives about 15 inches of snow a year, which is much more than what we are accustomed to.



Top 5 Companies:

1. Lockheed Martin (LMT)
Bethesda, MD
2. Danaher (DHR)
Washington, D.C.
3. General Dynamics (GD)
Falls Church, VA
4. Northrop Grumman (NOC)
Falls Church, VA
5. Marriott International (MAR)
Bethesda, MD



Industries

- Federal Government
- Professional Services
 - Tourism
 - Health Care
 - Education
 - Real Estate

Transportation Hubs

Ronald Reagan International Airport

- Located in Arlington, Virginia
- Nonstop flights to 96 domestic and 5 international destinations
- Air Canada, Alaska, American Airlines, Delta, Frontier, JetBlue, Southwest, United



1. www.flyreagan.com
2. www.unionstationdc.com

Union Station

- Amtrak's Headquarters
- Also houses the Metro, Maryland Rail Commuter Service and Virginia Railway Express



Traveling to and from Home

Louis would drive 15 minutes to the Memphis International Airport where he would get a connecting flight, first flying to Atlanta, then flying to D.C. He would then drive around 15 minutes to his apartment. A round trip flight from Memphis to D.C. typically costs \$250. This cost combined with the price of rides and food would cost \$300 in total. The flight would take 3h 45min. This combined with the length of the drives and time spent in the airports results in 7 to 8 hours of total travel time.

Mary would drive 5 minutes to Jackson's Medgar Evers Airport where she would get a connecting flight, first flying to Atlanta, then flying to D.C. She would then drive 15 minutes to her apartment. A round trip flight from Jackson to D.C. typically costs \$175. This cost combined with the price of rides and food would cost \$225. The flight would take 4 hours. This combined with the length of the the drives and time spent in airports results in 7 to 8 hours of total travel time.

Jake would drive two hours from Meridian, MS to Birmingham, AL where he would get a connecting flight, first flying to Atlanta, then flying to D.C. He would then drive 15 minutes to his apartment. A round trip flight from Birmingham to D.C. typically costs \$175. This cost combined with the price of gas, rides, and food would cost \$240. The flight would take 3h 15min. This combined with the length of the drives and time spent in airports results in 7 to 8 hours of total travel time.

Commute

Commuting within the DC area is much easier and more affordable than most other US cities with one of the best and most developed metrorail systems in the nation. During peak hours fares range from about \$2-\$6 and off-peak hours it's closer to \$1.85-\$3.85. Driving is also very common especially from the suburbs. Many people will often drive to the train station nearest to their house and then take the train the rest of the way. The city itself is also very walkable with short distances between metro stations.

Three Organizations

- Bread for the City: helps low income DC residents by providing food, clothing, medical care, and legal and social services to reduce the burden of poverty.
- A local church such as Bethesda Presbyterian
- Meals on Wheels: provides meals to isolated seniors around the nation.

Sports, Entertainment, Recreation

There are lots of different things to do in DC from sporting events, concerts, hiking, museums. The city also has one of the best food scenes in the country.

Sports teams include- the Nationals, the Washington Football Team, the Wizards, the Capitols, and DC United



<https://washington.org/visit-dc/things-see-do-capitol-riverfront>



<https://allamericanbeerfest.com>

Crimes

According to the Metropolitan DC Police Department website, there were 198 homicide cases in the city of Washington (a 19% rise from 2019) and a total of 3,992 cases of violent crime (a 4% decrease from the previous year). In total there was a 19% decrease in all crime violent or not between 2019 and 2020. Surrounding suburbs, such as Bethesda or Arlington, have much lower crime rates, and crime tends to be more prevalent in the southeast rather than the affluent Northwest Quadrant, Capitol Hill, or the suburbs

Healthcare

There are at least four nationally ranked hospitals in the DC metro area and more than 15 “high performing” hospitals in all number of specialties. Washington is also home to two of the nation’s highest ranked children’s hospitals- Children’s National Medical Center and Johns Hopkins Children’s Center.

School Districts

Living in the Bethesda-Chevy Chase area our kids would be zoned for schools in the Montgomery County School district, which is one of the top five school districts in Maryland.



Housing

We want to live outside of the city in a suburb
We want to have at least 1 roommate to save on rent

Eaton Square at Arlington Ridge

- Arlington, VA
- 2 BR, 1 Bath
- 795 square feet
- \$1,447-\$1,589
- Near public transit, parking, laundry in unit

Cambridge Square

- Bethesda, MD
- 3 BR, 1 Bath
- 1,100 square feet
- \$2,125
- Near public transit, laundry facilities, free parking



Conveniences

As a large city, Washington is home to many popular grocery chains such as Whole Foods and Trader Joe's; however, there are also many smaller local corner stores to shop at as well. Because we plan to have a car, it will make it much easier to transport groceries home from the store, and with laundry machines in our apartment, we won't need to find a laundromat. There are, however, multiple dry cleaners within a short distance.

Taxes

Although we will be working in D.C., we will be living in Bethesda, therefore, we will be residents of Maryland. According to marylandtaxes.gov, based on our incomes of \$60,000, we will be paying state income taxes at a rate of 4.75%. Maryland's sales tax rate is 6.0%. Based on smartasset.com's Maryland Tax Calculator and our income of \$60,000, our taxes and net income should look like:

Tax Type	Marginal Tax Rate	Effective Tax Rate	2020 Taxes*
Federal	22.00%	10.44%	\$6,262
FICA	7.65%	7.65%	\$4,590
State	4.75%	4.25%	\$2,551
Local	3.20%	2.92%	\$1,754
Total Income Taxes		25.26%	\$15,156
Income After Taxes			\$44,844
Retirement Contributions			\$0
Take-Home Pay			\$44,844

Our expected income after taxes should be approximately \$44,844

Monthly Budget

Monthly Take Home Pay: \$3,737

Rent (utilities included): \$708

Car Payment: \$395

Car Insurance: \$140

Gas: \$75

Monthly Metro Pass: \$44

Internet: \$60

Phone Bill: \$115

Groceries: \$300

Eating Out: \$250

Entertainment: \$150

Clothing: \$150

Gym Membership: \$80

Miscellaneous: \$300

Savings: \$1,120

Case 3: Excel Crash Course – Spreadsheet Formulas for Finance

By: Mary Crane

14 October 2021



801-750 West Pender Street Vancouver BC V6C 2T8

The Board of Directors of the
Corporate Finance Institute® have conferred on

Mary Crane

who has pursued studies and completed all
the requirements for the certificate of

Excel Crash Course - Spreadsheet Formulas for Finance

National Registry of CPE Sponsors Number: 139079

Instructional Delivery Method: QAS Self Study

Finance: 3.0 credits.



In accordance with the standards of the National Registry of CPE Sponsors,
CPE credits have been granted based on a 50-minute hour.

Certificate number
180816135

Handwritten signature of Tim Vipond.

Chair of the Board

Handwritten signature of Scott Powell.

Director

Handwritten signature of Lisa Dorian.

Director

Oct 14, 2021

Case 4: Financial Impact of COVID-19 on Pfizer

By: Mary Crane

Erin Morgan

Bennett Moore

27 October 2021

Summary

In this case study, we had twenty-minute blocks to research various topics related to Pfizer and the COVID-19 pandemic. For many of these topics, all three of us utilized different search engines when conducting our research. Each of the questions allowed us to take a deeper look into everything from Pfizer's financials to their lobbying methods, and even to a Presidential Executive Order. This case required us to work together under a stressful time limit, something we are sure to experience in our future careers.

One of the more shocking discoveries after researching the impact of COVID-19 on Pfizer's financial position and business operations is that shareholders saw an increase in earnings per share from 2019 to 2020 in a period where the stock market was struggling exponentially. Although it is obvious that Pfizer's vaccine revenues would increase in the present environment, it was surprising to see their net cash flows increase from 2019 to 2020. The article on Mike Yeadon was interesting, considering he previously served as Vice President of Pfizer, and he took a controversial stance on COVID treatments. Even though we were researching the similar topic regarding COVID-19 and Pfizer, we were able to find different information based on the search engine we were using. More specifically, the search engine "DuckDuckGo" was able to find information regarding Pfizer's stance on competing medicines. "Google" and "Brave" were unable to find relevant information on this topic, and "Google" tended to produce governmental sources more frequently than the other search engines. There were some similarities between the search engines that we used, but the main difference was the order in which sources were presented.

Module 1: Financial Impact of COVID-19 in 2020

Pfizer's operations, financial condition, and business have been impacted by COVID-19 in varying degrees for multiple reasons. To start, Pfizer is the primary leading pharmaceutical company in the United States and the main manufacturers of COVID-19 preventative measures such as masks, vaccines, and booster shots. As the demand for these products dramatically changed due to COVID-19, so did their financial position. Specifically, an "unfavorable impact of approximately \$770 million or 2 percent [occurred] due to covid 19, primarily reflecting lower demand for certain products in China and unfavorable disruptions to wellness visits for patients in the U.S, which negatively impacted prescribing patterns for certain products." However, the opposite economic effect was true for shareholders, as they saw earnings per share increase from 1.91 in 2019 to 2.22 in 2020.

Module 2: What the Internet is Saying About Pfizer

Using three different search engines, we were able to find similar results regarding Pfizer's vaccine revenues and financial position in 2021. According to Investopedia via the search engine Brave, Pfizer's COVID-19 revenue was roughly 60 percent higher than earlier estimated. Also, while most of the revenue is thought to be from the vaccine, Pfizer revenues grew operationally by eight percent. An increase in revenue is due to the increased ability by Pfizer to produce and distribute the vaccine. On top of the growth in revenue, with more age groups being able to get the vaccine and boosters getting approved, more and more will be produced and used. According to Forbes via the search engine DuckDuckGo, Pfizer should expect \$33.5 billion in COVID-19 vaccine revenue during 2021, an increase of previously estimated \$26 billion based off of the second quarter reporting. The second quarter reports were

also shocking in Pfizer's ability to mass distribute vaccines and booster shots, specifically over a billion doses. Also, according to CNBC via the same search engine, Pfizer expects many individuals to need a third booster dose in addition to the first two, which makes me believe that Pfizer's drastic increase in vaccine revenues will not go anywhere soon. Most shockingly, although Pfizer is experiencing constant increase in revenues during COVID-19, the pharmaceutical company continues to raise prices for the medicine. When we changed our search to "Pfizer COVID profits" we were able to find another diverse set of articles and facts. Using the search engines Brave and Google, we found that Pfizer dominated the distribution of vaccines around the world. Some countries even signed contracts with Pfizer concerning distribution and production of their vaccines.

Module 3: Ivermectin and Hydroxychloroquine

The top two results that are generated when searching "hydroxychloroquine covid studies" on Google are from governmental websites that suggest Hydroxychloroquine is consistently effective in treating COVID-19 when provided early. These sites also suggested that no worse outcomes were found as a result of HCQ use, only positive ones. In contrast, the first results on google for ivermectin as a treatment for COVID-19 suggest that it can be harmful and is not at all effective in treating humans infected with COVID-19.

Drugs.com claims that Hydroxychloroquine, an FDA approved drug used to treat malaria, rheumatoid arthritis and lupus, is ineffective and does not provide medical benefits for hospitalized patients. However, for people who are infected with Covid-19 and discover it in its early stages, Hydroxychloroquine is more effective. It is important to note that different countries around the world have different medical beliefs and practices, combining and researching Hydroxychloroquine with other medicines at different doses to find the best

solution. Ivermectin is another substitute for Hydroxychloroquine when considering medicines and remedies to combat COVID-19 without resulting in vaccination. Ivermectin is an anti-parasitic drug primarily for worm treatment, and msn.com claims that using Ivermectin for treatment has become “politicized” and is still considered a controversial solution.

Using the search engine Brave, new articles that were not on the other search engines appeared. According to Cochrane, on the topic of whether Hydroxychloroquine is useful in treating people with COVID-19 or in preventing infection in people who have been exposed to the virus, it stated that it did not reduce deaths and caused more unwanted effects.

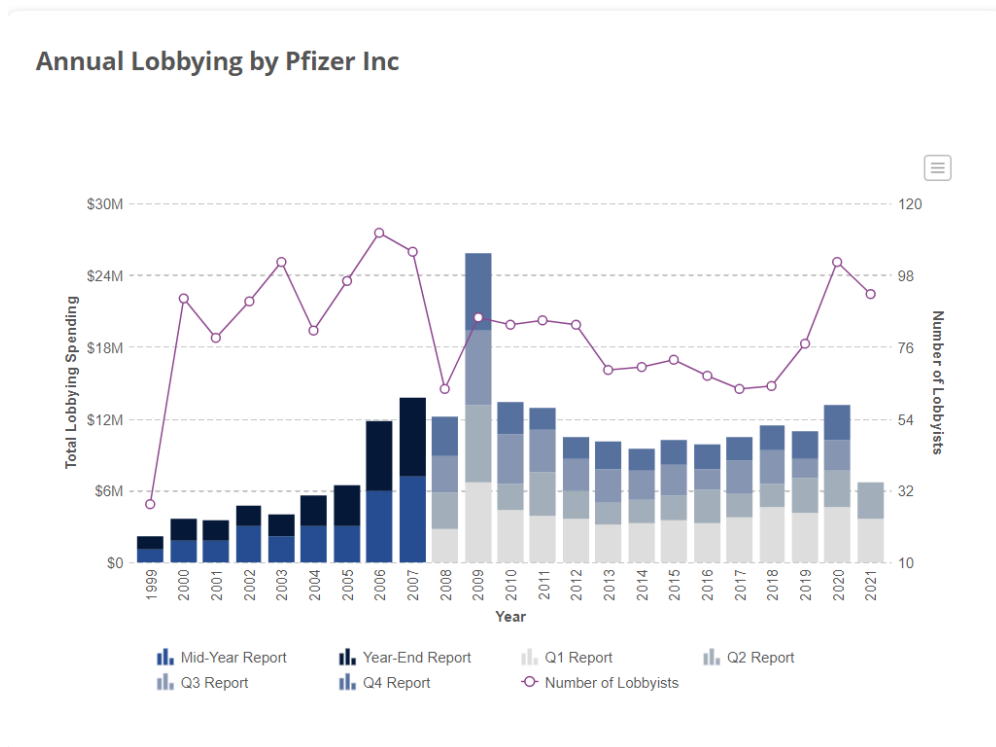
Hydroxychloroquine is a drug typically used for rheumatic disease and other autoimmune diseases, therefore, some thought it would be a beneficial drug to prevent or treat patients from COVID-19. The studies did not provide clear or strong results and it was recommended that further research not be conducted. Additionally, the National Institute of Health claimed that patients treated in hospitals with Hydroxychloroquine actually ended up needing longer hospitalization times and were more likely to need ventilation.

Module 4: Pfizer’s Thoughts on Alternative Treatments

The former Vice President of Pfizer, Mike Yeadon, claimed that early denial of Hydroxychloroquine and Ivermectin as an effective treatment of COVID-19 was intentional in an attempt to get the vaccine to market quicker. Yeadon made other bold claims, stating that “data is not clear” regarding the effectiveness of the vaccine. Yeadon claims that Hydroxychloroquine is able to make the viral load in a person less likely to progress, and other treatments like Ivermectin and zinc are possible effective solutions. The most interesting statement that Yeadon makes is that he believes the denial of these medicine’s effectiveness on combating COVID-19 was a fraud scheme in order to make people more attracted and willing to

take the vaccine. This denial in effectiveness would also lead to the vaccine reaching market earlier in desperation for an acceptable treatment. He stated that the system is pressurized, meaning journalists and other media outlets depicted a negative image of Ivermectin and Hydroxychloroquine in order to glorify the vaccine. Yeadon claims that “Ivermectin was working really well, and they were literally suppressing the manuscript, at journal level.” It is apparent that Pfizer knew the whole time that these treatments could be effective as they are working to create two of their own treatments, one that is oral, and another that is intravenous.

5. Lobbying Efforts Before and After COVID-19



[Pfizer Inc Lobbying Profile • OpenSecrets](#)

The lobbying efforts made by Pfizer has dramatically increased since 2019 due to COVID-19 as dozens of Pfizer has recently hired two new lobbying firms as of October first of this year in efforts to lobby on drug pricing as negotiations become heated. One of these firms

include TheGROUP DC, a firm that has a former staffer to President Biden. The other newly employed firm is called Federal Health Policy Strategies, and the two firms, along with dozens of others, are currently lobbying to mitigate “Democrats’ plans to have the government directly negotiate the prices for medicines.” Supposedly, the lobbying efforts are going well so far.

Pfizer has been able to increase their lobbying efforts due to their increased revenue and impact on a global level. In 2019, Pfizer had 77 lobbyists, which grew to 102 in 2020, their highest lobbyist amount since 2006. Already in 2021, they have announced 92 lobbyists. With the approved third booster dose of the vaccine and more age groups being able to get the vaccine, Pfizer has increased their overall lobbying budget, and we expect this to continue for the near future. They spent a large amount of time lobbying the Centers for Disease Control and Prevention and FDA since these two organizations had a large impact on producing and approving the vaccine.

6. Executive Order

The executive order declared by President Joe Biden on September 9, 2021, stated that all federal employees must be vaccinated against COVID-19. Specifically, “[e]ach agency shall implement, to the extent consistent with applicable law, a program to require COVID-19 vaccination for all of its Federal employees, with exceptions only as required by law”. In addition, the executive order demanded that all private-sector employers with 100 or more employees require either vaccination amongst employees or undergo weekly testing. This is a very different policy from his statements made prior to being elected, telling Americans he would never implement a vaccine requirement.

The change in policy came after additional information regarding the status of the Pfizer vaccine and mutation of COVID-19. The requirement to get the vaccination stemmed from the

FDA approval of the vaccine and the CDC determining the best way to slow the spread would be administering the vaccine to individuals.

Case 5: Interview

By: Mary Crane

19 November 2021

Summary

In this case, I was given a list of questions and tasked with interviewing someone that I know and respect in the business community. The catch, however, was that I must speak to someone that I am either intimidated by or that I do not particularly care for. In doing this, hopefully I would gain a different perspective on this person and understand why I had certain feelings about them prior to the interview.

I chose to interview Emily McGairty. Emily is the co-owner of Flawless Boutique, which has a physical location in Flowood, Mississippi, and is also online. She also happens to be my boss because I worked at the store in high school, and still work there when I am home from college. I interviewed her because, of the two bosses at the store, she is the one I interact with the least. She was my teacher when I was in junior high before she ever started the boutique, and I do not think that I have ever stopped seeing her as an authority figure in the classroom. Now that we work side by side, we can have more of a coworker relationship, but through all these years, I still have not quite gotten to that point. I always bring any questions or concerns that I have to her co-owner instead of Emily herself because we just have an easier relationship. By doing this interview, I learned that Emily is extremely passionate about the work that she does. Nothing brings her more joy than choosing inventory, making the store look beautiful, and serving customers. She oftentimes gets so caught up in all the things she can be doing at the store, that it may come off as her being standoffish to the other workers, but it all boils down to the fact that she loves her job and wants to make sure everything is as good as it can be. After talking to Emily at length about her journey, I have more respect and understanding for her, and I think that this will open the door for us to have a better relationship moving forward.

1. Tell me about your life growing up before you started college or your career.

She described her early years as “pretty average”. She grew up with two other sisters in a Christian home in Pearl, Mississippi. Everyone in her family went to college, so she did too. She always knew she wanted to own her own store, but she thought that it would take more money than she would ever have. Instead, she went to college at Mississippi State as a general business major that eventually turned into marketing with plans of being a pharmaceutical sales representative.

2. What were your college years like?

The first word she said was simply “wild”. She was a member of Zeta Tau Alpha sorority at Mississippi State, something she said shaped her entire college experience. She said she was not very mature early on in college and did not care about her grades much in her first two years but worked extremely hard in her last years to increase her GPA. She credited her sorority experience for her attention to her grades and for pushing her to be involved in student organizations, such as Student Association.

3. How did you decide to pursue this field of study?

Going into college, she knew she did not want to be an engineer, lawyer, teacher, or in the medical field, so she did what a lot of undecided college students do and majored in business. Initially she thought she wanted to follow in her father’s footsteps and focus on the technology side of business, but after a few computer classes, she quickly realized that was not the path for her. She then pursued a marketing degree because she thought she wanted to work in pharmaceutical sales.

4. Walk me through your first job to where you are now. What important things did you learn at each position along the way.

After college, she got a job as an assistant manager at Abercrombie & Fitch and after about a year there, she was promoted to store manager at Hollister. She did both jobs to gain experience before pursuing her goal of working in sales, but she really gained valuable experience for what she does now. After working in retail, she moved to what she thought would be her career, working in sales for a company called Ganz. She did that for a year, but she hated the travel that it required and was uncomfortable pressuring people to buy things. She went back to school to get her teaching license and taught various subjects at Pelahatchie Attendance Center and Pearl Junior High School for a total of nine years. She and her friend Lauren, another teacher at Pearl Junior High at the time, started “Flawless Boutique” on Facebook as a hobby on the side, and eventually they were both able to leave their jobs as teachers and run the store full-time.

5. What has been your most challenging and difficult hurdle so far?

The most challenging hurdle she has faced so far was deciding to move her business location from Pearl to Flowood. Both Emily and Lauren are from Pearl, love Pearl, and are well established in the community. In Pearl they had a very cheap rent on their building and were very comfortable, but the opportunities were so much bigger in Flowood. They struggled with their decision at first, but they have not looked back since moving to Flowood almost three years ago.

6. What has your life been like outside of your work?

The word she used to describe her life outside of work was simply “fun”. She and her husband, Brian, have three sons, six-year-old twins and a seven-year-old. She is involved with PTSSO at her kids’ school, and she enjoys all the sports and activities her boys are involved in.

7. What do you wish you would have known when you were 21 years old about life and your career? What piece of advice would you share with me and my classmates?

When she was twenty-one, she wishes she would have known to not ever give up on her goals. She knew she wanted to own her own store, but since she never thought she would be able to achieve it, she gave up for several years. As far as advice, she challenged us to push for bigger goals and to not settle if we are unhappy.

8. What are you most proud of?

She is most proud of opening the store in Flowood because it has been more successful than she ever imagined. She truly loves going to work every day. When she and Lauren started selling clothes on Facebook, they never saw going full time as a possibility. In only two years they went from Facebook to a tiny room connected to a hair salon to their location in Pearl and finally their location in Dogwood, which she says they will never leave.

9. What has been the best vacation you've ever taken? What is left on your bucket list?

She said that their best vacation she has ever taken is Disney World. She likes it because regardless of whether you are taking kids or just going with adults, there is something for everybody to enjoy. As far as her bucket list, she wants to go on a trip to Paris with her husband.

10. What do you think will be the biggest challenge for your generation?

She thinks that the biggest challenge for her generation will be learning to deal with staffing issues. We are in a time when people do not show up for interviews, employees are not concerned about showing up on time but want to leave early, and they want to be

off at the last minute. Additionally, it is challenging to find workers that have a strong work ethic and are willing to take initiative in their work.

11. What will be the biggest challenge for my generation?

As for my generation, she believes the biggest challenge will be to overcome the stereotypes that are out there. We will need to prove to future employers that not all of us are lazy, we can focus on the tasks at hand, and we are able to communicate face-to-face and not only through technology.

Case 6: ExxonMobil – Overview

Mary Crane – mlcrane@go.olemiss.edu

Spence Graves – wsgrave1@go.olemiss.edu

Trey Johnson – ejohnso7@go.olemiss.edu

Winn Sams – wmsams@go.olemiss.edu

Elizabeth Shirley – enshirle@go.olemiss.edu

8 February 2022

This week was an overview week for the rest of the case study. During the class period, we researched the company using news articles, market statistics and data, research databases, and other sources to find information on the company we chose, ExxonMobil (XOM). Two of the focus areas in our research were the business lines the company uses and threats that the company faces to its operations. Aside from using the research to get an overview of the company, we used information we gathered to create an organizational chart of the company, its notable subsidiaries, and the business lines they fall into.

On March 16, 2020, ExxonMobil hit a stock price of \$32.74, the lowest it had been since 2002. On the first of October of the same year, it dropped even lower, dropping to a price of \$32.62. Since then, it has steadily regained its stock price, closing at \$80.62 on January 31, 2022, with behavior projected as bullish in short, medium, and long term. To bolster this momentum, ExxonMobil has made several changes to and plans for the corporation, including, but not limited to, a new board of directors elected in July of 2021, moving the corporate headquarters, and the consolidation and restructuring of its business lines.

ExxonMobil has around thirty notable subsidiary companies in which it holds varying amounts of ownership interest. Each subsidiary company is categorized into an overarching business line. These business lines are ExxonMobil Upstream, ExxonMobil Downstream, and ExxonMobil Chemical. Effective April 1, 2022, ExxonMobil will be restructuring these business lines to build upon streamlining and consolidation started in 2019. These new business lines are ExxonMobil Product Solutions, ExxonMobil Low Carbon Solutions, and ExxonMobil Upstream Company. Technology and engineering organizations will be consolidated into ExxonMobil Technology and Engineering while several service organizations will be centralized to assist the reorganized business lines. Product Solutions will focus on the “engineering, manufacturing, and

delivery” of products while also developing their sustainability. Low Carbon Solutions will “commercialize [ExxonMobil’s] extensive low-carbon technology portfolio” while also focusing on refining and developing low-carbon energy systems to meet climate agreement goals and reduce emissions.

By mid-2023, ExxonMobil plans to move its headquarters from Irving, Texas to its campus north of Houston. Chief Executive Officer Darren Woods as well as around 250 other employees will relocate during this move. This move is projected to create more than \$6 billion in savings. ExxonMobil Carbon Solutions President Joe Blommaert believes that Houston provides the business line with an ideal location for research and innovation in its carbon capture and storage effort. This move will make ExxonMobil the largest Fortune 500 company in the Houston metropolitan area with Houston Mayor Sylvester Turner voicing support for the move and the benefits the move is projected to bring.

Due to the start of the coronavirus pandemic in early 2020, Exxon experienced a tough year as far as revenues are concerned and reported a \$22 billion loss for the year. They were able to bounce back dramatically in 2021, reporting profits of \$23 billion. Oil prices averaged more than \$70 a barrel in 2021 leading to some of the profitability, but even still, the dramatic turnaround in a single year was surprising to investors. Additionally, Exxon generated \$48 billion in cash flows from operating activities, its highest number since 2012, which came in around \$4 billion over what analysts expected. However, a point of concern for Exxon, despite having overcome so much debt between 2020 and 2021, is its debt-to-capital ratio. It is still higher than its 10-year average and higher than another leader in the industry, Chevron.

While the massive gain in profits in 2021 is huge for Exxon, it would not have been possible without the forward-thinking of company leaders amidst the difficulties that the year

2020 brought the company. Exxon leaders realize that commodity prices are volatile in the short-term, so they place their focus on the long-term outlook for the business. They know that energy demand will rise back to normal levels as COVID-19 impacts phase out, and that demand will continue to rise as the world's population is expected to grow by about 1.6 billion people by 2040. With the expanded demand for energy, oil is expected to remain at the top with natural gas knocking off coal for the number two spot. Exxon is committed to making new discoveries and getting more out of previous discoveries by investing in the technology needed to do so. The needed investments will total to trillions of dollars by 2040, so it is important that Exxon starts investing now, even if demand remains constant in the interim.

ExxonMobil is working with many well-known institutions to develop alternatives to fossil fuels, but even this may lead to more problems in the future. Through expensive research and development, the company will have to not only make an eco-friendly energy source but one that is also competitive in price and quality. With alternative energy sources such as wind, solar, and hydroelectric power and the rising popularity of electric transportation, ExxonMobil and the industry are being forced to keep up with the changing times or risk getting left behind.

Reputation is also a huge factor for the corporation. Events like the BP oil spill have huge impacts on stock prices, supply chain, and reputation for the industry as a whole. More people are beginning to show interest in their ecological footprint, and the actions of the oil and gas industry have an effect on consumer decisions. Exxon has committed to the future carbon capture and storage of the hundreds of millions of metric tons of CO₂ that are still being released into the atmosphere.

Exxon is a very capital-intensive corporation; therefore, they need consistent sources of funds. If the industry's public reputation is tarnished, that can influence stock prices. When the

pandemic struck, it hit the oil and gas industry hard. Demand plummeted and prices went with it. Their sources of capital are consumer dependent; if consumers are not buying then the company has no way to fund capital projects. Demand is also being affected by market competition. There has been a rise in private sector oil and gas companies as well as state run organizations.

The US and other countries have placed laws and regulations on the industry that affect limits on emissions, trade tariffs, and mandatory use of alternative energy sources. Oil and gas companies have an emission tax while other companies building and promoting fossil fuel alternatives are receiving assistance from governments. Some jurisdictions prohibit ExxonMobil and similar corporations from conducting business, yet other competing industries may not have the same restrictions. ExxonMobil Corporation has been through many seasons of change. They have struggled through issues with civil unrest, sustainability, global pandemic, and industry expansion to name a few, but the company has adapted to its changing environment and thrived.

ExxonMobil is comprised of hundreds of subsidiaries that help make up its three main divisions: upstream, downstream, and chemical. The upstream division, which supports the production side of the company, is focused on exploration of these natural resources and developing these sites for drilling. Because the upstream division is focused entirely on the infrastructure of the company, it is the largest drain on capital for Exxon. Next this leads to the downstream division, which is the refining, marketing, distribution, and selling of the oil and gas products, and it brings in most of the company's revenue using the resources developed by the upstream division. The chemical sector of the company is involved with sustainability research and development and expanding into complementary industries such as car part manufacturing.

COMPANY



STRUCTURE

UPSTREAM

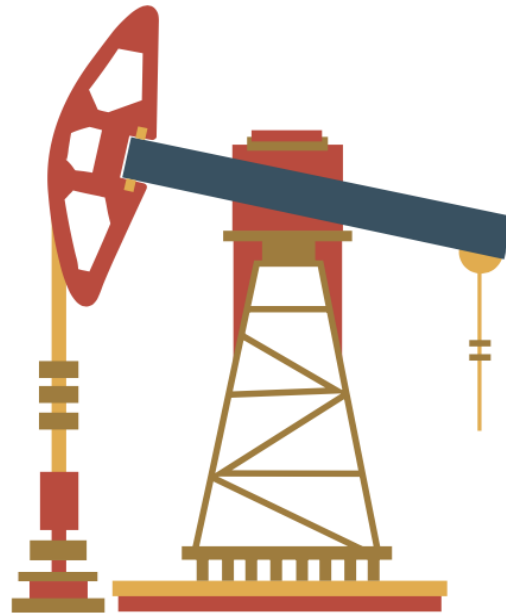
- Aera Energy LLC
- Barzan Gas Company Limited
- BEB Erdgas und Erdoel GmbH & Co. KG
- Cameroon Oil Transportation Company S.A.
- Caspian Pipeline Consortium Kazakhstan
- CORAL FLNG, S.A.
- Cross Timbers Energy, LLC
- Golden Pass LNG Terminal LLC
- Golden Pass Pipeline LLC
- Marine Well Containment Company LLC
- Mozambique Rovuma Venture, S.p.A.
- Nederlandse Aardolie Maatschappij B.V.
- Papua New Guinea Liquefied Natural Gas Global Company LDC
- Permian Highway Pipeline LLC
- Qatar Liquefied Gas Company Limited
- Qatar Liquefied Gas Company Limited (2)
- Ras Laffan Liquefied Natural Gas Company Limited
- Ras Laffan Liquefied Natural Gas Company Limited (II)
- Ras Laffan Liquefied Natural Gas Company Limited (3)
- South Hook LNG Terminal Company Limited
- Tengizchevroil, LLP
- Terminale GNL Adriatico S.r.l.

DOWNSTREAM

- Alberta Products Pipe Line Ltd.
- Fujian Refining & Petrochemical Co. Ltd
- Permian Express Partners LLC
- Saudi Aramco Mobil Refinery Company Ltd.

CHEMICAL

- Al-Jubail Petrochemical Company
- Gulf Coast Growth Ventures LLC
- Saudi Yanbu Petrochemical Co.



SEE NEXT PAGE FOR SEPERATE BUSINESS LINE NARRATIVES

UPSTREAM

Exxon's upstream business segment is the beginning of the chain that leads to the production of gas and energy. Using innovation and the latest technology, Exxon aims to participate in the exploration, development, production, and marketing phases of the oil and gas industry. Exxon has organized its Upstream model into five categories which are conventional, unconventional, deepwater, Liquefied Natural Gas (LNG), and heavy oil. Exxon has developed a low supply costs in deepwater, unconventional Permian, and LNG has positively impacted the Upstream business segment which affects both the Downstream and Chemical business segments as well.

DOWNSTREAM

As one of the largest refiners in the world, Exxon manufactures and exports products derived from crude oil and other feedstocks. Exxon's global network of manufacturing centers and distribution centers provides fuels, basestocks, finished lubricants, and other high-value products to various customers worldwide. Their downstream operations are mainly comprised of fuels and lubricants for aviation, passenger and commercial vehicles, and marine equipment. However, downstream activities such as the production of asphalt and erecting retail service stations are still relevant to Exxon and their day-to-day operations.

CHEMICAL

ExxonMobil Chemical is one of the largest chemical companies in the world. Numerous ExxonMobil facilities take crude oil and natural gas and turn them into feedstocks that are used in medical equipment, electronics, clothing, vitamin capsules, tires and many other products.

Case 7: ExxonMobil – Audit

Mary Crane – mlcrane@go.olemiss.edu

Spence Graves – wsgrave1@go.olemiss.edu

Trey Johnson – ejohnso7@go.olemiss.edu

Winn Sams – wmsams@go.olemiss.edu

Elizabeth Shirley – enshirle@go.olemiss.edu

16 February 2022

This week was the audit phase of the competition overview. Our task this week was to summarize the risks of various accounts and methods of testing and analysis for the purposes of auditing. We looked at the accounts in the financial statements provided in the company's Form 10-K, specifically the income statement and balance sheet. We scrutinized each account provided, looking at the risks associated with misstatements in each account. Out of these accounts, we picked three accounts we believed would be the sources of the greatest risks and found internal controls to reduce misstatement risk for each account. We also checked different substantive tests for its ability to evaluate whether an account is misstated. We also thought of different ways that we could make these tests more efficient using analytical processes and procedures, streamlining the audit process. These are all important steps in the audit process to make sure things are done correctly and efficiently. One misstep by the company or auditor could cost Exxon billions of dollars.

With a company involved in the sale of products, revenue is likely the riskiest account with the highest consequences. If the sales and revenue account is misstated the entire financial statement is affected. When the account is overstated, retained earnings are overstated which allows for more money to be allocated to stockholders, but the following year will see negative effects if the account is corrected. The company could benefit from this misstatement, which gives a rationale for fraudulent activities, because managers could receive monetary or promotional benefits and the company would appear more attractive to investors and creditors.

The sales and revenue account could also be understated. This is most often done for tax purposes because higher revenues lead to higher income taxes, so the company may want to even out the strain of taxes. The auditor of ExxonMobil's financial statements stated that the internal controls were effective as of December 31, 2020, but there is always room for improvement. We

suggest simple ideas that are incredibly important to the corporation's success: segregation of duties for cash receipts to account for all funds, individual log in credentials when working with transactions, a periodic change in staff to review all transactions and edits, and continuous follow ups to check for extra or missing transactions. One easy method the auditor could use to assist in the audit process is a computer-assisted audit system for large volumes numbers. This is likely already in place, but it is a useful tool that should be utilized on a consistent basis. When applying data analytics to the audit practice, an important set is to normalize the data to make it easier for employees and auditors to analyze the information. The next method to simplify the mass of data the company produces is to use a visualization software such as Tableau. Tableau could change the massive amount of data and transactions into more understandable material for non-technical users. This would benefit non-technical employees and end-users by allowing them to see the effects of transactions. It also simplifies the data for analysts to make forecasts and strategic plans to improve cash flow. Most of all the auditor would be able to see any obvious dramatic change in revenues.

For any company that sells goods, like Exxon, inventory is a key account and by extension, it can be very risky. Inventory is a current asset account, and if a company committed fraud purposefully or not and overstated the inventory balance, the value of total assets would also be boosted. On the other hand, a company could receive a shipment and choose not to record it, thus understating a liability account such as accounts payable. ExxonMobil uses the LIFO method of inventory valuation, which is common and accepted by GAAP, but it carries some risks as well. Since they use LIFO, it is possible that Exxon is holding very old inventory on its books that is no longer recorded at a reasonable price. In order to mitigate the risk of understating the inventory balance while overstating the cost of goods sold balance, it is

important to liquidate the inventory on a regular basis and make sure old inventory has not become obsolete. One way for a company to have control over its own inventory is to employ segregation of duties. The employee who receives inventory should not be the one that also handles it after it is received so there is no way an employee could steal any number of items without being recognized by the next employee to handle the goods. Additionally, the number of items on the receiving report should be left blank so that an employee must physically count the items instead of just going off the numbers they were supposed to receive. Once these internal controls are in place, the external auditors come in and check with fresh eyes if everything has been done correctly. The easiest way for an auditor to check inventory numbers is to physically count it. Being able to see and touch actual inventory is more definite than any other records or estimates could be. Auditors can also compare purchase orders to the corresponding receiving receipts and sales invoices to ensure that quantities, prices, and dates match, and that all documents have been properly signed off. A way to use technology to help eliminate risk when dealing with inventory is by using a program like tableau to visualize exactly where inventory is located, how much of it is there, and when it got there.

A major section of ExxonMobil's business is the Upstream business segment, which involves a large amount of exploration and development. As a result, property, plant, and equipment plays a vital role within the business, using equipment such as exploratory wells, productive wells, and development dry holes. The property, plant, and equipment account include machinery and equipment as well as other exploratory expenditures which costs lots of money and as a result make the account risky. A significant risk with this account comes from the year-to-year estimates. The 10-K states that in 2020 there was an adjustment of \$46 billion because of an overstated estimation. Because depletion and depreciation were overstated, the

PPE account was drastically understated in 2019. This could cause poorly supported capital expenditure decisions. There are many forms of internal controls that can be used to properly support this account. First and often most important is physical examinations and controls. Safety is incredibly important in this industry, so it should be a high priority to make sure everything is running properly, and all the employees are using the correct safety measures. It is also important to do examinations to analyze the state of any part of PPE. This will help with valuation of depreciation and depletion. There should be alternating executives signing off on the controls to make sure they are done correctly and completely each time. A way to prevent risks within the property, plant and equipment account is through the use of Enterprise Risk Management (ERM), which deals with assessing significant risks and ways to respond to these risks. The process of ERM could be especially useful if implemented during exploration. ExxonMobil could find what areas are less risky and could hold more value when deciding to develop them.

When performing analysis on this scale, it is important to identify the weakest links in the chain so that it can be managed correctly and given the attention it may need during evaluation and testing. This is especially true during an audit for a Fortune 500 company, where many of the accounts can have hundreds if not thousands of variables, making them very vulnerable to misstatements and errors. Revenues; property, plant, and equipment; and inventories are just three of these vulnerable accounts. The hazards associated with these accounts showcase the need for testing and strong internal controls while the complexity and extent of the information associated with these accounts demonstrates the need for efficiency and a streamlined testing process with the help of data analytics. Without the proper controls and modernized systems in place, auditing would be an insurmountable task to complete in the time available to even the

most experienced professionals. When these weakest links in the chain do not have their weaknesses and vulnerabilities addressed, and auditing becomes impossible, entire companies can take the fall.

Case 8: ExxonMobil – Tax

Mary Crane – mlcrane@go.olemiss.edu

Spence Graves – wsgrave1@go.olemiss.edu

Trey Johnson – ejohnso7@go.olemiss.edu

Winn Sams – wmsams@go.olemiss.edu

Elizabeth Shirley – enshirle@go.olemiss.edu

2 March 2022

This week was the tax phase of the competition overview. Our primary focusses this week were researching Exxon's current tax status and diving deeper into how they can effectively minimize their legal cash tax payments. Before structuring two tax strategy recommendations for Exxon, we first needed to comprehend how taxes are specifically allocated to Exxon and the rest of the oil industry. We also needed to identify the discrepancies between tax rates in the United States and other countries. For example, Exxon and other big oil industry companies get an average tax break of \$3.34 on every barrel of domestic crude they produce. Not only did tax codes overseas have an impact on our recommendations, but also current world events such as the invasion of Ukraine by Russia.

Understanding how Exxon currently uses tax accounting methods was also just as paramount in the formation of our recommendations. Comparing these current methods against a variety of others by way of making a pros-and-cons type of list allowed us to get a wider view of why Exxon currently accounts for taxes the way they do. After forming our recommendations, we then needed to roughly compute Exxon's tax savings for each strategy. Forecasting these tax savings over multiple future tax periods also would indicate if these savings would be something to look forward to for the long-term or the short-term.

During our research we found that ExxonMobil has had problems with tax refunds in recent years. In the later months of 2021, the IRS found and is disputing a refund on claims on tax overpayments in the countries Qatar and Malaysia. They denied the tax refund because they believed ExxonMobil did not pay nor incur taxes to deduct, which in effect did not correctly satisfy its tax liabilities while stating the tax credit on the production of fuels. The tax refund was worth \$1.3 billion and none of it was able to be claimed. The following recommendations are designed with these recent issues in mind to recoup those losses in a long-term strategy.

Exxon has been decreasing its presence in Russia for over a decade. After recent events, it is more important than ever that Exxon further decrease its presence in that area. The sanctions against Russia will place major limitations on oil and gas operations, and the Build Back Better Act will make it even more difficult for Exxon to remain profitable in that region. After the sanctions on the Russian government and their elite families, the Ruble is now worth less than one US penny. Exxon is scrambling to find a bank to back their operations, but all of Russia's largest banks are no longer funded by Western institutions. This will make it difficult to pay salaries and wages to Russian citizens working for Exxon. The Build Back Better Act is suggesting many changes to the United States international tax laws concerning how they tax non-United States income beginning in 2022. Some of these changes include adjusting rules for the global intangible low-taxed income (GILTI) as well as many foreign tax credits, as they would now be required to calculate earnings on a country-by-country basis. This would cause ExxonMobil to carry forward Net Operating Losses within certain countries one taxable year as well as reduce Qualified Business Asset Investments (QBAI) from 10 percent to 5 percent. Under the BBB, certain rules under Section 250 will be removed and there will no longer be a taxable income limitation as well as a cutback on the FDII and GILTI deductions from 28.5 percent to 24.8 percent. In considering these net operating losses, Exxon would have to research and find procedures to defer income or accelerate deductions so that the changes to Section 250 will not be as dangerous to the business. The Build Back Better Act will also implement limitations on interest expense on international financial reporting groups.

Pulling out of Ukraine could be an option, but with the current tension between Ukraine and Russia, Ukraine will rely on other countries for its oil and gas needs, becoming a potentially greater revenue source for ExxonMobil. The Nordstream Pipeline, the newest Russian pipeline,

is also mostly owned by the Russian government which limits Exxon's access to natural gas and oil. There are many factors that lead to our decision to pull out of Russia, but the numbers speak for themselves. Over the last four years, Exxon has pulled at least \$400 million of assets out of Russia and plans to continue the path. Leaving will cause a major hit to revenue in the first few years but will save the company possibly billions of dollars in the future by avoiding more sanctions from wartime and impairments caused by the BBB. The company will be able to write off these assets and carry the loss to later taxable years to spread the impact of the loss and decrease taxes. If they carry the loss, the offset in taxes will help later years when net income rises to normal and higher levels.

If the Build Back Better Act passes through the Legislature and eventually becomes part of the law, Exxon should take advantage of the extension on being able to deduct qualifying research and experimental expenses. As it currently stands, beginning in 2022, companies are required to capitalize and amortize all R&E costs, but extending the date out to at least 2025 gives Exxon a few years to take advantage of the tax deduction and the ability to begin projects on its agenda with a lesser tax burden.

Exxon supported President Biden reentering into the Paris Climate Agreement upon taking office and has outlined a plan to reduce greenhouse gas emission in accordance with the Agreement. It will take serious investment from Exxon to achieve its goals in this area which include dropping upstream greenhouse gas emissions by 15-20 percent, methane intensity by 40-50 percent, and flaring intensity by 35-45 percent. Over the last two decades, Exxon has invested more than \$10 billion to research, develop, and deploy lower-emission energy solutions. The company is still working to develop innovative solutions in the areas of carbon capture, biofuels, hydrogen, and energy-efficient process technology that will further help to fulfill the objectives

of the Agreement. In planning for how to act if and when the Build Back Better Act does pass, it makes sense for Exxon to continue to invest on the same level as the last two decades into research and experimental causes, and they may even be able to invest more since the tax break would be extended. If they kept spending on par, they would spend around \$2.5 billion on research and development over the next five years when the tax break could be reconsidered. That will amount to a large tax savings for the company that would not be as large if they had to capitalize and amortize all of these expenses without the Act passing.

Taxes are a complicated subject to tackle for even the most experienced of accountants. There are so many factors that can affect the results one gets, especially when it comes to a corporation as big and far-reaching as ExxonMobil. Our initial difficulties in this assignment stemmed from the sheer amounts of moving pieces we were dealing with, including a still-developing political situation at the time of writing this. In the end, we were able to come up with two recommendations we believed would be a boon to ExxonMobil.

Our first recommendation was to undergo considerable downsizing in Russia. With political, industrial, and economical circumstances regarding the region considered, we believe that the initial loss in revenue from operations in the country would eventually bring about a greater economic benefit in the long term to ExxonMobil. Our second recommendation was for ExxonMobil to take advantage of write offs related to research and experimental expenses before they are not available anymore. The current administration's goals align with ExxonMobil's past research and development agendas and will work well together. We believe ExxonMobil should strategize around the extension of the write-offs with the Build Back Better Act or some other legislation from the Biden administration, while also doing its best to take advantage of them in the present. These write-offs provide a great benefit to the corporation and should be taken

advantage of before they no longer can. Overall, these recommendations and the restructuring that comes with them may not lead to instantaneous gains but in the long-term, ExxonMobil's finances will be improved with these strategic changes.

Case 9: ExxonMobil – Advisory

Mary Crane – mlcrane@go.olemiss.edu

Spence Graves – wsgrave1@go.olemiss.edu

Trey Johnson – ejohnso7@go.olemiss.edu

Winn Sams – wmsams@go.olemiss.edu

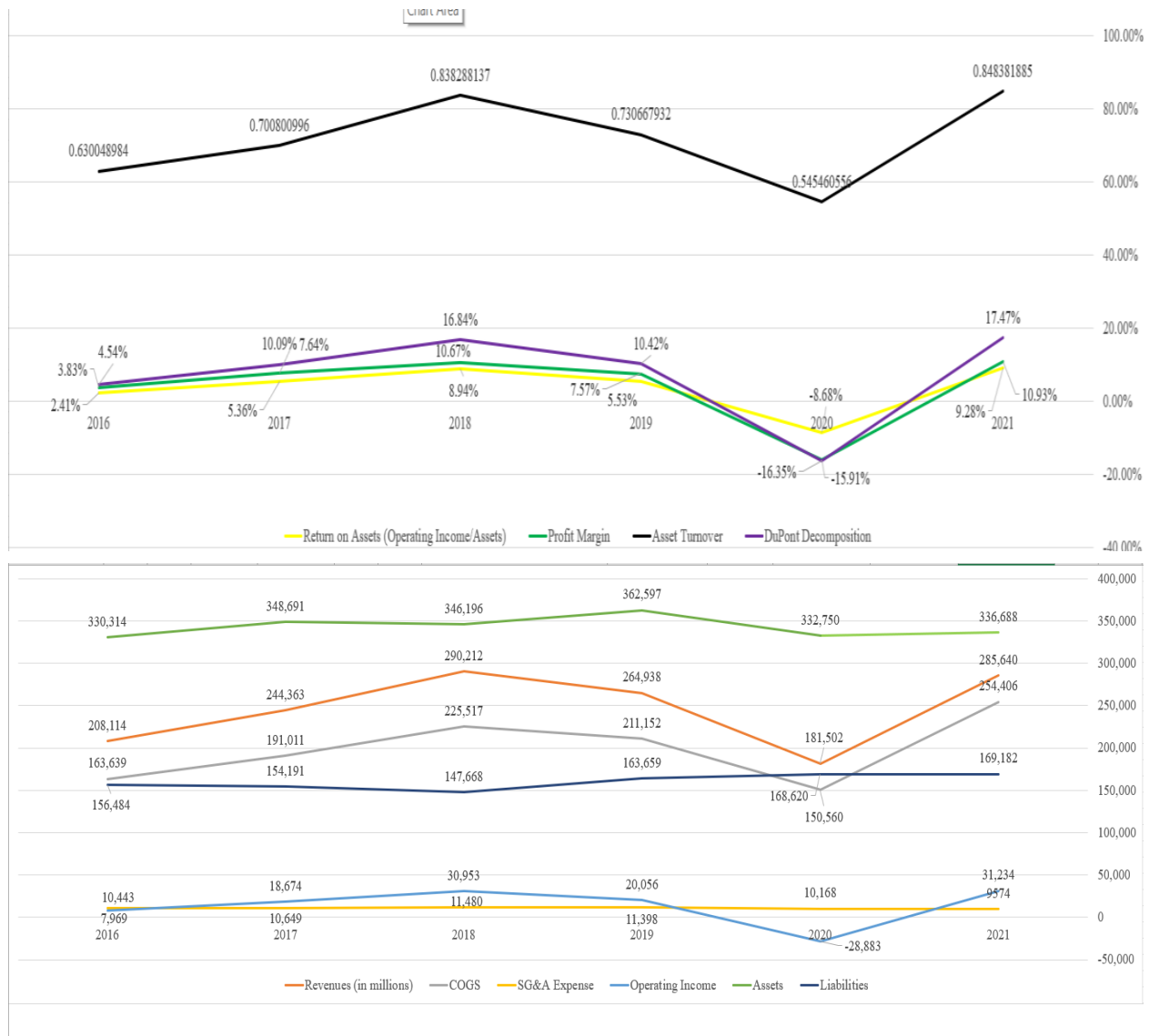
Elizabeth Shirley – enshirle@go.olemiss.edu

23 March 2022

This week we were tasked with advising Exxon on how to mitigate the two biggest threats the company is facing at the moment. In order to do this, we first looked at trends in company numbers over the last five years and discussed how our findings corresponded with Exxon's strategy of cost leadership. We noticed that while revenues made a huge recovery in 2021 after the loss in 2020, the current world political climate and the Russian invasion of Ukraine threaten to limit revenue and profit margin once again. Because of the crisis overseas, oil prices for Exxon have risen and have been passed on to consumers in the United States, causing gas prices to skyrocket over the last month. Many people are no longer able to afford the same amount of gas they once were, so they are buying less and driving demand down. Additionally, in today's world, people are becoming more environmentally and socially conscious. The pressure is on Exxon to find ways to be more efficient and responsible with natural resources and the environment. Overall, we learned this week just how fast circumstances in the world can change and how companies like Exxon must react quickly. If we had done this assignment even a month ago, our recommendations would have been different based on the climate at that time.

ExxonMobil pursues a strategy in cost leadership to portray themselves in the market as the cheapest provider of products and services to give them a competitive advantage over similar companies. In a 2016 transcript from an Exxon analyst meeting, it is said that "cost leadership is a fundamental expectation that requires continual focus at our company. Regardless of business conditions, we expect to lead the cost curve and are benefiting from ongoing efficiencies and cost deflation". This focus on cost leadership also helps to reduce project costs, which improve numerous long-term investment returns. The challenge within this cost leadership strategy is when innovation is necessary. In order to bring new products to the market effectively, the

organization must forecast how they will minimize cost. Focusing on increasing the organization's speed and efficiency is also paramount, to do this, Exxon implements innovative technology. Since 2000, Exxon has dumped over \$16 billion dollars into research and development. These research and development projects not only focus on energies that will meet the world's new emission standards but also innovations in technology that will work to improve existing products and processes. Although ExxonMobil's main focus is to strategize using cost leadership, the chemical sector of the business has certain areas which strive to compete with similar companies by product differentiation. The goal of the chemical sector is to find innovative ways to create new technologies and higher-quality chemical products that will generate more profit for the business. Exxon has had a major emphasis in the push for next-generation energy solutions, which include natural gas technologies, carbon capture and storage, and more advanced biofuels. These biofuels are a product that the company believes could be an innovative step towards a new method of transportation. An example of another product that Exxon has created to separate itself from its competitors is the gas-treating technology, RapAdsorb, which lessens the amount of energy and machinery needed to remove water and CO₂ from natural gasses. Because of these innovation-focused approaches, asset turnover can appear lower than one would expect of a cost leader. While sectors like Chemical focus on product differentiation, it is clear that the organization's main motivation is to implement a cost leadership strategy, which then maximizes shareholder value and reinvestment opportunity. The following charts plot values that can reflect the strategy. Assets and liabilities had no annual reports of value yet, so the end values of the final quarter of 2021 were used.



Revenues have slowly decreased since the beginning of the pandemic, alongside operating income, asset turnover, and cost of goods sold, indicating a fall in sales. This is likely due to a lack of demand resulting from the pandemic, with the loosening of restrictions allowing for increases in 2021. However, these rebounds may not be long-term. The oil and gas industry is headed into a period of demand destruction which will be harmful to the world economy. As prices of oil barrels continue to rise from civil unrest, gas prices are skyrocketing to prevent major losses, but this is causing even more problems. More and more people are unable to afford the prices set at gas stations. This decrease in demand and steady increase in the price of oil and

gas will continue to pull away from each other, the higher the price, the lower the demand. This has happened before, so we can only hope to learn from the past to find the best course of action for Exxon. In the 1970s, there was civil unrest in the Middle East and war in Vietnam that caused major increases in the price per barrel of oil and a decrease in the availability of oil.

With the past in mind, our group has decided that the best thing for Exxon Mobil to do would be to combat this situation by simply reducing the damages. Civil unrest is in the simplest terms a diversifiable risk which they combat now with their chemical section. It comes with the territory of being in this industry, so Exxon will have to find ways to survive the major hit to the net income they will receive this year. Now that they have decided to pull out of their Russian oil and gas operations, continuous write-offs are the next best step for the company. This will reduce assets and net income essentially balancing out the losses and decrease the size of the company. To recover from the loss of assets in Russia, they will have to invest more heavily in operations in other countries which may further decrease net income for this year but will help the company continue to grow in future years. With both assets and income decreasing, the return on assets would grow for the foreseeable future as ExxonMobil continues reducing its assets in Russia. For similar reasons, asset turnover would behave in the same way.

In 1989, Exxon Valdez ran into a reef off the coast of Alaska spilling millions of gallons of oil killing much of the ocean life in the area. This incident was avoidable which pushed many people to boycott the company. During our interview, we learned that even to this day, this individual will avoid ExxonMobil gas stations when possible. This shows just how important ESG issues are in our country. Exxon should make social and environmental commitments to the public by doing things that will bring about positive thinking. Their research and progress in limiting CO₂ emissions is a great step forward, but this industry produces more pollution than

most. Committing to yearly wildlife cleanups even in areas unaffected by the oil and gas industry would show Exxon's commitment to leave this world better than they found it. While this is not a quantifiable benefit for the company and may even show more loss than gain, it will benefit the company and its consumers far into the future.

In light of current events, ExxonMobil is facing plenty of threats to its success. The Russia-Ukraine conflict has damaged Exxon's holdings and interests in Russia, leading us to believe they should be cut off. Environmental, Social, and Governance issues are now an important factor in public opinion of companies, and ExxonMobil needs to continue to lead the industry in solving these issues. Both of these will keep the company healthy. Overall, with the risks at play for ExxonMobil currently, solutions like these will be needed to keep the company out of danger.

Case 10: ExxonMobil – Risk Assessment

Mary Crane – mlcrane@go.olemiss.edu

Spence Graves – wsgrave1@go.olemiss.edu

Trey Johnson – ejohnso7@go.olemiss.edu

Winn Sams – wmsams@go.olemiss.edu

Elizabeth Shirley – enshirle@go.olemiss.edu

30 March 2022

There are many risks involved in operating a business, hundreds of variables that can, each in their own unique way go wrong. In a corporation the size of ExxonMobil, this number of variables is many times larger with even more ways to go wrong. One would think that the modern world would have solved this issue, making a business easier to handle and run on a day-to-day basis. However, while some issues have been fixed, the modern world comes with its own issues. Operations, larger macroeconomic issues, and cybercrime all play a part in potential failure of a corporation. ExxonMobil definitely faces these issues as well, probably more than most as an industry leader. To ensure that ExxonMobil still has a future as a company, it will need to address the risks it faces on those three levels.

One of the greatest operational risks facing Exxon today is global warming and climate change. These have become increasingly hot topics in recent years, and they will continue to become more and more important to people in the future. Since fossil fuel emissions are one of the leading contributors to climate change, and they are a major part of Exxon's operations, it is important for the company to stay on top of this risk. In general, climate change is already affecting supply threats to the oil and gas industry. For example, domestically, the freeze in Texas in 2021 and Hurricane Ida causing oil spills in the Gulf of Mexico both caused historic disruptions to the industry. In addition to those instances, globally, temperature extremes, floods, and rising sea levels are threatening oil and gas reserves. The climate change that has already taken place has significantly affected where oil and gas producers like Exxon can perform their operations safely. On the political side of things, President Biden has a goal to decrease greenhouse gas emissions by at least 50 percent by 2030, and he reentered the Paris Climate Agreement which has similar goals. By producing oil and natural gas, Exxon emits significant amounts of carbon dioxide as part of its operations and would need to make significant changes

to be in line with these goals. The company is committed to doing so by devoting \$15 billion of increased spending until 2027 to work on greenhouse gas emission reduction projects.

Additionally, the company has been working for years on plans to safely store and capture carbon dioxide instead of releasing it into the atmosphere. These plans are great for the short-term, but to truly get ahead of climate change and prepare for the future, Exxon needs to turn some of its attention to using renewable energy sources. This will undoubtedly change its operations drastically at first, but it will benefit the company in the long-term more than having to deal with the governmental restrictions on emissions that are sure to come.

The oil and gas industry and the energy industry will more than likely always be a necessity in today's world. To remain a success in this industry however, it is important for Exxon to realize that helping the US economy and the world economy will play a significant role in their continued success. There are many unforeseen circumstances that can affect the global economy that Exxon can have no effect on but there are some things Exxon can do to spur growth. If the macroeconomic factors of this country are positive, Exxon will be more likely to expand production, therefore, creating more jobs and further improving the economy as a whole. This can have positive effects on the world economy as well. Any country that Exxon operates in can be majorly affected by the decisions of the company.

We recommend that Exxon increase production in the US by investing profits or retained earnings back into the company and offer more stock option compensation plans to employees. This plan will create more jobs upstream and downstream and help the company avoid any repercussions of inflation. The current inflation rate is 7.9 percent, a record high, and is continuing to rise. A company like Exxon has simple ways to avoid taking major hits due to inflation. Investing in capital is the easiest way to avoid these issues. By reinvesting in the

company, Exxon will encourage growth within the business which will improve the overall economy even further. Lower unemployment rates will mean a healthier economy where people will have more disposable income to further reinvest in the health of our nation's economy. Currently the unemployment rate is 3.8 percent (5.7 million US citizens), a 2.4 percent decrease since the Covid economic shutdown. The lower the unemployment rate, the more the economy will continue to grow.

As the relationship between technology and business strengthens, it is particularly important for large companies to focus on cybersecurity. Cybersecurity risks have affected a multitude of companies already and have leaked confidential information about their employees, finances, and future plans. In early May 2021, the largest pipeline in the United States, the Colonial Pipeline, was hacked. This ultimately led to millions of Americans across the eastern United States being left without gas for a period of time before the hack was reversed and the pipeline was operational again. According to Bloomberg writers William Turton and Kartikay Mehrotra, hackers gained entry into the networks of Colonial Pipeline through a virtual private network account, which allowed employees to remotely access the company's computer network. The account was no longer in use at the time of the attack but could still be used to access Colonial's network. The Russia-linked cybercrime group known as DarkSide took responsibility for the attack and demanded a \$4.4 million ransom. DarkSide also reportedly obtained over 100 gigabytes of data from Colonial Pipeline and threatened to leak it if the ransom was not paid in full. After President Joe Biden declared a state of emergency, Colonial paid the attackers. While this historic event is a tragedy, it came as a wake-up call to not only other oil and gas companies, but all major companies. After the cyberattack on Colonial Pipeline, Energy Factor, an online resource sponsored by Exxon that explores technology and innovation

in the energy industry, sat down and spoke with Martha Miranda. Martha is a 28-year veteran of the company and leads the team responsible for enabling the company's fuels and lubricants business to respond to a major cyberattack, as well as ensuring rapid recovery in the event of a disruption (Energy Factor, 2021). In the interview, Martha exclaims, "We're doing everything we can to keep pace in terms of our ability to respond, but we also need to be humble. Because the challenges are diverse. In some cases, these are smaller players with access to advanced programs and expertise, but in other cases, there could be foreign governments involved. You have to be flexible and ready for anything".

ExxonMobil, in their efforts to reduce the environmental impact of climate change, has invested many of their resources into technologies and other systems to improve their renewable energy resource efficiency, which in turn increases the risk of cybersecurity and attacks. A major target that cyber attackers look for is within supervisory control and data acquisition (SCADA) systems within new industrial networks. As new systems and infrastructures are created in hopes to reduce climate change, these systems have been implemented into these new designs. The risk that occurs with the SCADA systems is that many times they are outdated and easy for hackers to infiltrate if they are not properly updated with new security features. As technology increases, the demand for remote access has also increased, which also expands the risk for cyberattacks. In order for Exxon to mitigate the risk of a potentially devastating cyberattack, they must update systems such as SCADA so that hackers do not have easier access to delicate information. Though this might be a costly project, it is necessary in order to keep supply chains and numerous forms of communication safe and secure. Another action that ExxonMobil should take in order to mitigate cybersecurity risks is to research the security protocols of other organizations and companies which they are involved with. If one organization within the ExxonMobil supply

chain is hacked, the attackers could potentially be able to invade ExxonMobil's systems. By analyzing and assisting in the improvement of these businesses' security systems, it could save ExxonMobil millions of dollars, as well as customers.

Risks are meant to be taken on. No company can find success or profit without engaging in something risky, but that does not mean that a corporation should absorb every potential loss that is associated with these risks. It would not be healthy for the company's growth. Risks should be mitigated to ensure that a company can continue to find success. To ensure success and stability, ExxonMobil should invest in renewable energy and carbon-reduction technologies, its own employees and capital, and infrastructure that will protect it from security leaks and other cybercrime. By doing this, Exxon can strengthen its financial wellbeing and stay in the forefront of its industry, ensuring success for the near future.

LIST OF REFERENCES

Case 4:

https://s21.q4cdn.com/317678438/files/doc_financials/2020/ar/PFE-2020-Form-10K-FINAL.pdf

<https://www.nytimes.com/2021/05/04/business/pfizer-covid-vaccine-profits.html>

https://www.democracynow.org/2021/8/5/headlines/amid_soaring_profits_moderna_and_pfizer_to_raise_covid_19_vaccine_prices

<https://www.abc.net.au/news/2021-10-20/pfizer-covid-19-vaccine-contracts/100553958>

<https://www.investopedia.com/pfizer-q1-fy2021-earnings-report-recap-5182268>

<https://www.cnbc.com/2021/07/28/covid-pfizer-pfe-earnings-q2-2021.html>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7534595/>

<https://www.fda.gov/consumers/consumer-updates/why-you-should-not-use-ivermectin-treat-or-prevent-covid-19>

<https://www.nejm.org/doi/full/10.1056/NEJMc2114907>

<https://www.cochrane.org/news/chloroquine-or-hydroxychloroquine-useful-treating-people-covid-19-or-preventing-infection>

<https://www.covid19treatmentguidelines.nih.gov/therapies/antiviral-therapy/chloroquine-or-hydroxychloroquine-and-or-azithromycin/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7987362/>

<https://www.drugs.com/medical-answers/hydroxychloroquine-effective-covid-19-3536024/>

<https://www.msn.com/en-us/health/medical/why-do-people-want-to-take-ivermectin-for-covid/ar-AAOr5R3>

<https://www.palmerfoundation.com.au/former-pfizer-vp-yeardon-exposes-how-early-treatment-with-ivermectin-and-hydroxychloroquine-were-squashed-to-get-vaccines-to-market/>

<https://www.politico.com/newsletters/politico-influence/2021/10/01/pfizer-adds-more-lobbying-help-797991>

<https://rightsfreedom.wordpress.com/2021/10/10/revealed-pfizer-lobbying-hits-decade-high-as-dozens-of-high-profile-political-appointees-become-big-pharma-reps/>

<https://www.opensecrets.org/news/2021/08/pfizer-full-fda-approval-greater-profits/>

<https://www.whitehouse.gov/briefing-room/presidential-actions/2021/09/09/executive-order-on-requiring-coronavirus-disease-2019-vaccination-for-federal-employees/>

Case 6:

<https://www.businesswire.com/news/home/20220131005318/en/ExxonMobil-Streamlines-Structure-to-Enhance-Effectiveness-Grow-Value-Reduce-Costs>

<https://www.foxbusiness.com/economy/exxonmobil-corporate-headquarters-houston-restructuring>

https://energyfactor.exxonmobil.com/insights/partners/houston-ccs-hub/?utm_source=google&utm_medium=cpc&utm_campaign=XOM+%7C+Corp+%7C+Lowering+Emissions++CA+%7C+Traffic+%7C+Brand+%7C+Announcement+%7C+Emissions+%7C+BMM&utm_content=Brand+%7C+%5BStandalone%5D+Emissions&utm_term=%2BExxon+%2BMobil+%2BEmissions&ds_rl=1289360&ds_rl=1289363&gclid=Cj0KCQiA9OiPBhCOARIsAI0y71D9GyNI1Ej7e6gHJTdQnERwloKkyQjud7LX-NJMUPrFFEne6UmuO_EaAqkCEALw_wcB&gclid=aw.ds

<https://corporate.exxonmobil.com/-/media/Global/Files/investor-relations/annual-meeting-materials/annual-report-summaries/2020-Annual-Report.pdf>

<https://finance.yahoo.com/quote/XOM/>

<https://www.wsj.com/articles/exxon-mobils-gusher-of-cash-means-harder-decisions-ahead-11643743811>

<https://ir.exxonmobil.com/static-files/12d442a1-9503-450f-86a5-139512ce2f35>

https://www.business-standard.com/article/international/exxonmobil-to-move-headquarters-to-houston-from-dallas-suburb-122020101087_1.html

Case 7:

<https://investor.exxonmobil.com/#Positioningforalowercarbonenergyfuture>

Case 8:

<https://corporate.exxonmobil.com/news/viewpoints/commitment-paris-agreement>

https://corporate.exxonmobil.com/News/Newsroom/News-releases/2022/0201_ExxonMobil-earn

[S-23-billion-in-2021_initiates-10-billion-share-repurchase-program](https://corporate.exxonmobil.com/News/Newsroom/News-releases/2022/0201_ExxonMobil-earn/S-23-billion-in-2021_initiates-10-billion-share-repurchase-program)

<https://news.bloombergtax.com/daily-tax-report/irs-disputes-1-3-billion-exxonmobil-tax-refund-claim>

<https://www.macrotrends.net/stocks/charts/XOM/exxon/total-provision-income-taxes>

<https://www.investopedia.com/articles/investing/011216/understanding-how-oil-companies-pay-taxes.asp>

<https://www2.deloitte.com/us/en/pages/tax/articles/tax-credits-and-incentives-for-oil-and-gas-producers-in-a-low-price-environment.html>

https://corporate.exxonmobil.com/news/news-releases/2020/1214_exxonmobil-announces-2025-emissions-reductions_expects-to-meet-2020-plan

<https://ir.exxonmobil.com/static-files/12d442a1-9503-450f-86a5-139512ce2f35>

Case 9:

<https://energyhistory.yale.edu/units/oil-shocks-1970s>

<https://corporate.exxonmobil.com/Energy-and-innovation/Research-and-development-highlights#Processintensification>

<https://www.corestrengths.com/exxonmobil/#:~:text=ExxonMobil's%20corporate%20strategy%20has%20been,new%20ideas%20to%20market%20effectively.>

<https://corporate.exxonmobil.com/-/media/Global/Files/investor-relations/analyst-meetings/2016-Analyst-Meeting-Transcript-pdf.pdf>

Case 10:

<https://www.investopedia.com/insights/macroeconomic-analysis/>

<https://www.zdnet.com/article/the-race-towards-renewable-energy-is-creating-new-cybersecurityrisks/#:~:text=The%20energy%20industry%20is%20already,for%20cyber%20criminals%20to%20exploit.>

<https://www.bloomberg.com/news/articles/2021-06-04/hackers-breached-colonial-pipeline-using-compromised-password>

https://corporate.exxonmobil.com/News/Newsroom/News-releases/2021/0422_ExxonMobil-expands-renewable-fuels-agreement-with-Global-Clean-Energy-Holdings

https://corporate.exxonmobil.com/News/Newsroom/News-releases/2021/1201_ExxonMobil-announces-plans-to-2027-doubling-earnings-and-cash-flow-potential-reducing-emissions

https://corporate.exxonmobil.com/News/Newsroom/News-releases/2021/1201_ExxonMobil-announces-plans-to-2027-doubling-earnings-and-cash-flow-potential-reducing-emissions

<https://fas.org/blogs/sciencepolicy/countering-climate-change-with-renewable-energy-technologies/>

HONOR CODE AND SIGNATURE

On my honor, I pledge that I have neither given, received, nor witnessed any unauthorized help on this thesis.

Mary R Crane