Energy Sector Recommendations

By Yimeng Hu, Michael Jing, and Steve Klein

Current SIM Portfolio

- SIM Portfolio contains
 - Chevron, ConocoPhillips, Magellan, SM Energy, Schlumberger
- Our recommendations
 - o Buy Chevron
 - Buy ConocoPhillips after a period of inspection
 - Buy Schlumberger
 - Add PDC Energy to the portfolio

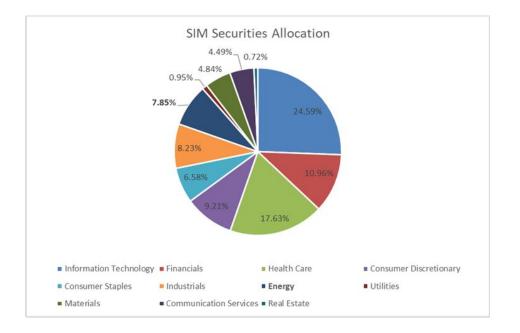






Recommendation

- The SIM portfolio should be overweight energy
 - Positives of our recommendation
 - Largest YTD increase
 - Negatives
 - Susceptible to influence by government
 - Which industry should be overweight?
 - Oil, Gas, and Consumable Fuels
 - Accounts for about 94% of energy sector





Chevron Corporation (CVX)

Recommendation								
Current Price (07/15/22)	137.65							
Stock Rating	BUY							
Price Target	187.29							
Implied Upside	36.1%							
Dividend Yield	3.92%							

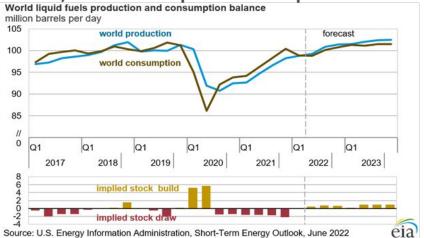
Fundamental Drivers

• In the past 20 years, the price of crude oil and natural gas is highly correlated to the performance of the Energy Sector as a whole. Figure below identifys an R2 value of 0.724 between Crude Oil and Chevron Corporation stock price



Crude Oil price

The Brent crude oil spot price averaged \$113 per barrel (b) in May 2022.
 EIA expects the Brent price will average \$108/b in the second half of 2022 and then fall to \$97/b in 2023. Current oil inventory levels are low, as shown in figure below, which amplifies the potential for oil price volatility.



Risks

ESG

• ESG stands for Environmental, Social, and Governance. Investors are increasingly applying these non-financial factors as part of their analysis process to identify material risks and growth opportunities. Chevron is planning \$10 billion in lower carbon capital investment between 2021 and 2028 with the goal of reducing the carbon intensity of our oil, products and gas business and building new lower carbon energy businesses.

Russia-Ukraine war

God bless the people in Ukraine. The Russia-Ukraine war ends will result Crude Oil price drop.

OPEC production increase

Key Financial Ratios

 The table below is showing different financial ratios of the companies in S&P 500 Energy sector, with similar size. All the companies had significant growth in quarterly revenue compared to a year earlier, as well as the earnings. Thanks to the high crude oil price in the first quarter of 2022.

Table 4

	Quarterly Revenue	arterly Revenue Quarterly Earnings		Forward Annual	ROA	ROE
	Growth (YoY)	Growth (YoY)	Margin	Dividend Yield	(TTM)	(TTM)
CVX	68.30%	354.50%	12.22%	3.98%	5.51%	14.69%
XOM	52.50%	100.70%	10.86%	4.09%	6.10%	15.59%
COP	82.80%	486.50%	33.40%	2.22%	12.95%	27.83%
OXY	57.70%	N/A	25.26%	0.86%	5.96%	34.10%

DCF Model

Analyst: Michael Jing			T	erminal Disc		11.5%					
7/1/2022 Million				Terminal FC	F Growth =	3.0%					
Year	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Year	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Revenue	244,931	220,137	185,595	187,451	196,824	204,697	212,885	219,271	225,849	232,625	239,604
% Growth		-10.1%	-15.7%	1.0%	5.0%	4.0%	4.0%	3.0%	3.0%	3.0%	3.0%
Operating Income	39,924	33,681	30,252	29,992	31,492	32,751	34,062	35,083	36,136	37,220	38,337
Operating Margin	16.3%	15.3%	16.3%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%
Taxes	10,779	9.094	8,168	8,098	8,503	8,843	9,197	9,473	9,757	10,049	10,351
Tax Rate	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%
Net Income	29,144	24,587	22,084	21,894	22,989	23,909	24,865	25,611	26,379	27,171	27,986
% Growth		-15.6%	-10.2%	-0.9%	5.0%	4.0%	4.0%	3.0%	3.0%	3.0%	3.0%
Add Depreciation/Amort	25,838	23,206	19,540	19,736	20,722	21,551	22,413	23,086	23,778	24,492	25,226
% of Sales	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%
Plus/(minus) Changes WC	(2,300)	1,077	1,500	1,515	1,591	1,654	1,720	1,772	1,825	1,880	1,936
% of Sales	-0.9%	0.5%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Subtract Cap Ex	9,396	8,439	8,882	8,971	9,419	9,796	10,188	10,493	10,808	11,133	11,466
Capex % of sales	3.8%	3.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%
Free Cash Flow	47,887	38,278	31,242	31,144	32,701	34,010	35,370	36,431	37,524	38,650	39,809
% Growth		-20.1%	-18.4%	-0.3%	5.0%	4.0%	4.0%	3.0%	3.0%	3.0%	3.0%
NPV of Cash Flows	201,853	55%									
NPV of terminal value	162,425	45%							Teri	minal Value	482,394
Projected Equity Value	364,278	100%									
Free Cash Flow Yield	16.80%								Free	Cash Yield	8.25%
Current P/E	9.8	11.6	12.9						Т	erminal P/E	17.2
Projected P/E	12.5	14.8	16.5								
Current EV/EBITDA	4.7	5.4	6.2						Terminal	EV/EBITDA	8.0
Projected EV/EBITDA	5.9	6.8	7.8								
Shares Outstanding	1,945										
Current Price	\$ 146.51										
Implied equity value/share	187.29										
Upside/(Downside) to DCF	27.8%										

Valuation

- Though Chevron Corporation company financial performance was fluctuated a
 lot in the past 5 years, before the COVID-19 pandemic, the company
 demonstrated their strength in growing business. Therefore, the terminal growth
 rate should be stabilized around 3%.
- Considering the interest rate hike of this year, the year end interest rate will fall into a 3.4% to 3.8% according to Wall Street Journal. The terminal discount rate should be higher than normal years, though oil and gas industry carry relatively lower risk premium. With a Beta 1.08, the reasonable terminal discount rate of the DCF model is 11.5%.

ConocoPhillips (COP) - Overall Introduction

- -ConocoPhillips (COP) is an American multinational corporation engaged in the hydrocarbon exploration and production, and the company is based in the Energy Corridor district of Houston, Texas.
- -In 2021, the total earnings of ConocoPhillips are \$8.1 billion, with Crude Oil taking 49.61% of sales, Natural gas liquids 11.09%, Natural gas 35.07% and Bitumen 4.21%.
- -Recent major event is the change of essential leadership: Tim Leach, previously executive vice president, has become advisor to the chief executive officer. COP also announced that Jack Harper, previously president, Permian for ConocoPhillips, and former president of Concho Resources, has assumed the role of executive vice president.
- -Following is the stock price of COP (left) and stock outstanding (right) in the past 12 months:



ConocoPhillips (COP) - Systematic & Unsystematic Risks

- -Global political uncertainty: The War between Russia and Ukraine caused the profitability of ConocoPhillips to increase over 60% due to increasing oil price. However, as the war began to step into the end phase, we have already seen drop in COP stock price.
- -Changing economic pattern: Improved performance of ConocoPhillips may be due to the high U.S inflation rate. Thus, the overall performance may be limited as U.S is lowering the interest rates to control overwhelmingly high inflation rate.
- -Risks within COP: As the major leaderships has changed on May 2 this year, ConocoPhillips may face uncertainty when going through large business decisions, especially uncertainty with company structures.
- -ESG and environmental policies: As mindset of social and environmental responsibilities suddenly gain popularity around United State, ESG has already became a political correctness. Thus, the traditional energy companies, such as ConocoPhillips, will have hard time finding investments from public because of its conflict with ESG standard.



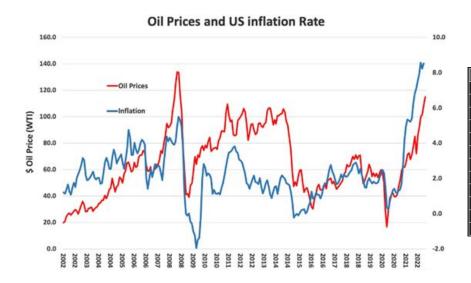






ConocoPhillips (COP) - Investment Strategy

- -Do not recommend investment right now as stock is still overpriced.
- -Invest after the regional conflict stabilized and U.S inflation come down.
- -Energy sector is still overvalued compare to the other sectors in S&P 500.
- -Wait until the change of leadership stabilized the organization of companies.



Sector	Last 12 months	Last 3 months	Last 1 month
S&P500 (SPX <index> <go>)</go></index>	-5.18%	-5.84%	-4.91%
Energy (S5ENRS <index> <go>)</go></index>	67.12%	27.05%	14.33%
Material (S5MATR <index> <go>)</go></index>	-3.34%	2.63%	-1.94%
Industrials (S5INDU <index> <go>)</go></index>	-12.30%	-4.90%	-6.02%
Cons Discr (S5COND <index> <go>)</go></index>	-5.18%	-5.84%	-4.91%
Cons Stap (S5CONS <index> <go>)</go></index>	3.00%	3.00%	0.00%
Healthcare (S5HLTH <index> <go>)</go></index>	5.45%	2.86%	-2.61%
Financials (S5FINL <index> <go>)</go></index>	-9.59%	-11.62%	-4.01%
Info Tech (S5INFT <index> <go>)</go></index>	-3.89%	-9.37%	1.32%
Telecom (S5TELS <index> <go>)</go></index>	-4.43%	-13.11%	-7.89%
Real Estate (S5RLST <index><go>)</go></index>	0.37%	-4.02%	-12.73%
Utilities (S5UTIL <index> <go>)</go></index>	13.36%	13.72%	1.45%

About Schlumberger

Premier oilfield service provider (ahead of Halliburton and Baker-Hughes)

Divisions include: Digital & Integration, Reservoir Performance, Well Construction, Production Systems

Operates in 120 countries and employs 160 nationalities

DCF Model

Analyst: Steve Klein		OD 1511:		Terminal Disc		10.0%					
7/12/2022	All values U	SD Millions		Terminal FCF	Growth =	5.0%					-
(000s)											_
Year	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	_
Revenue	26,827	30,851	35,479	31,931	31,292	29.728	30,619	33,681	36,376	38,558	-
% Growth	17.00%	15.0%	15.0%	-10.0%	-2.0%	-5.0%	3.0%	10.0%	8.0%		
EBIT	4,426	5,923	6,794	6,067	5,946	5,648	5,818	6,399	6,911	7,326	
Operating Profitability	16.5%	19.2%	19.2%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	
Interest Expense	537	586	639	575	563	535	551	606	655	694	-
Interest % of Sales	2.0%	1.9%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%		
Pretax Income	3,219	4,588	5,265	5,492	5,382	5,113	5,267	5,793	6,257	6,632	
Taxes	547	780	895	934	915	869	895	985	1,064	1,127	
Tax Rate	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	
Consolidated Net Income	2,672	3,808	4,370	4,558	4,467	4,244	4,371	4,808	5,193	5,505	
			·								
Minority Interest Expense	27	31	35	32	31	30	31	34	36	39	
% of Revs	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	
Net Income	2,645	3,777	4,334	4,527	4,467	4,244	4,371	4,808	5,193	5,505	
% Growth		42.8%	14.8%	4.4%	-1.3%	-5.0%	3.0%	10.0%	8.0%		
Add Depreciation/Amort	2,549	3,332	4,116	3,704	3,630	3,448	3,368	3,705	3,638	3,856	
% of Sales	9.5%	10.8%	11.6%	11.6%	11.6%	11.6%	11.0%	11.0%	10.0%	10.0%	
Plus/(minus) Changes WC	1,742	2,339	2,576	2,318	2,272	2,158	2,223	2,446	2,641	2,800	
% of Sales	6.5%	7.6%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%		
Subtract Capital Expenditures	1,489	2,005	2,466	2,219	2,175	2,066	1,837	2,021	1,819		
Capex % of sales	5.6%	6.5%	7.0%	7.0%	7.0%	7.0%	6.0%	6.0%	5.0%		
Free Cash Flow	5,447	7,442	8,560	8,330	8,194	7,785	8,125	8,938	9,653	10,232	
% Growth		36.6%	15.0%	-2.7%	-1.6%	-5.0%	4.4%	10.0%	8.0%	6.0%	
NPV of Cash Flows	52,726	38%									-
NPV of terminal value	87,815	62%								Terminal Value	
Projected Equity Value	140,541	100%									
Free Cash Flow Yield	11.78%									Free Cash Yield	
Current P/E	17.5	12.2	10.7							Terminal P/E	
Projected P/E	53.1	37.2	32.4								_
Current EV/EBITDA	64.1	48.3	41.0							Terminal EV/EBITDA	
Projected EV/EBITDA	77.6	58.5	49.6								_
Shares Outstanding	1,413										
Current Price	\$ 32.73										
Implied equity value/share	\$ 99.46										
Upside/(Downside) to DCF	203.9%										-

Why the Portfolio Should Have More Schlumberger

Strong future consensus in both sales and EPS Sales supposed to grow by 14% in 2022, 12% in 2023, and 5% in 2024 EPS expected to be 1.87 in 2022, 2.66 in 2023, and 3.10 in 2024

Transnational corporation

Profitable as long as oil remains above \$40 per barrel

Each division has increased sales and earnings YoY

Currently no competition from Russia

OPEC and OPEC+ operating at capacity

About PDC Energy

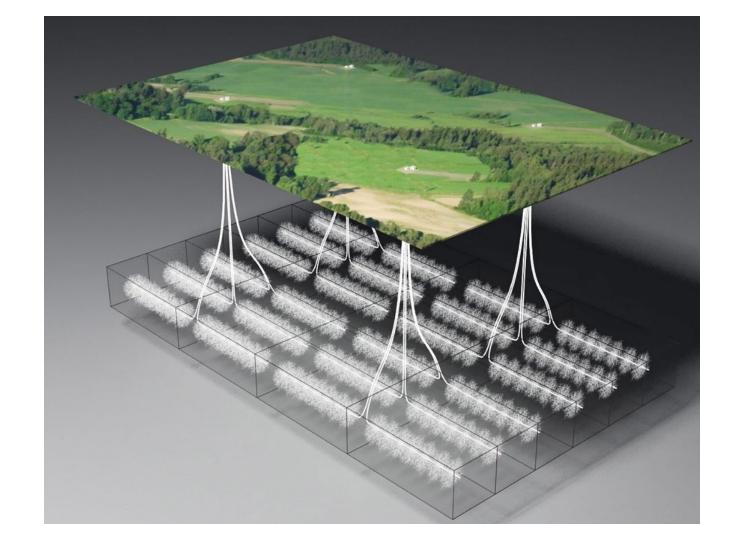
In the S&P MidCap 400

Operate in the Wattenberg Field and Delaware Basin

Focus on oil and natural gas liquids (NGL)

Committed to a strong balance sheet

Their core values emphasize integrity and respect for the environment and for the health, safety and well-being of their employees and the communities where they live and work



DCF Model

Analyst: Stev	1
7/18/2022	
(000s)	
Year	
_	
Revenue % Growth	
% Growin	
Income from	(
Operating Profita	
Interest Expe	
Interest % of Sal	6
Income befor	•
Income Tax E	•
Tax Nate	
Net Income	
% Growth	
Add Deprecia	ľ
% of Sales	
Plus/(minus) % of Sales	
Subtract Cap	i
Capex % of sale	
Free Cash Flo	
% Growth	
NPV of Cash	
NPV of termin	
Projected Eq	
Free Cash Flo	
Current P/E	
Projected P/Current EV/E	
Projected E\	
Shares Outst	
Current Price	
Implied equity	
Upside/(Down	r

nalyst: Steve Klein
18/2022
000s)
ear
evenue
6 Growth
come from Operations
Operating Profitability
terest Expense
nterest % of Sales
come before Income Taxes
come Tax Benefit (Expense)
ax Rate
et Income
6 Growth
dd Depreciation/Amort
6 of Sales
lus/(minus) Changes WC
6 of Sales ubtract Capital Expenditures
Capex % of sales
super 10 of Suids
ree Cash Flow
6 Growth
PV of Cash Flows
PV of terminal value
rojected Equity Value
ree Cash Flow Yield
urrent P/E
Projected P/E urrent EV/EBITDA
Projected EV/EBITDA
rojecteu EVILDITUA
hares Outstanding
urrent Price
nplied equity value/share
pside/(Downside) to DCF

Terminal Discount Rate

Terminal FCF Growth =

2026E

-5.0%

35.0%

-4.0%

1,340,713 | 1,273,677 | 1,146,309

(145.563)

1,187,488 | 1,128,114 | 1,015,302

(56.406)

-5.0%

-5.0%

15.0%

3.0%

-35.5%

-33.0%

545.862

109,172

434.870

(1,359,866) (1,291,872) (1,162,685)

3,830,607 3,639,077 3,275,169 2,947,652

2025E

-3.0%

35.0%

-4.0%

(153,224)

(59.374)

-5.0%

-8.1%

20.0%

3.0%

-35.5%

5.3%

766,121

114,918

649,288

All values USD Thousands

2023E

10.0%

40.3%

-4.0%

(159,237)

1.444.280

(199.046)

-5.0%

9.2%

25.0%

2.9%

-30.3%

-43.0%

44%

100%

4.7

7.4

2.4

3.7

1.151.139

(1,204,230) (1,401,923)

995,232

114,904

1,603,517 1,583,581

3.980.927

2024E

-0.8%

40.1%

-4.0%

-5.0%

-1.4%

20.0%

557

0.0%

-35.5%

-46.4%

4.8

7.6

2.6

4.1

616,614

789,816

1,245,234 1,228,164 1,128,114 1,071,708

(157.963)

1,425,618

(197,454)

3.949.080

2022E

95.00%

40.5%

-4.0%

-5.0%

3.619.025

1,465,705

(144,761)

1,320,944

(180,951)

1.139.993

1,085,707

523,021

(727, 424)

2.021.297

4,107,137

5.168.914

9,276,051

34.48%

5.1

8.1

2.5

3.8

98,546

59.48

94.13

58.3%

30.0%

14.5%

-20.1%

13.0%

6.8%

2027E

-10.0%

35.0%

-4.0%

(131,007)

(50.765)

964.537

655.034

98,255

-5.0%

-10.0%

20.0%

3.0%

-35.5%

27.7%

555,141

2028E

-10.0%

35.0%

-4.0%

1.031.678

(117.906)

913,772

(45.689)

868.084

589.530

88,430

(884,296)

661,748

-5.0%

-10.0%

20.0%

3.0%

-30.0%

19.2%

2029E

-5.0%

35.0%

-4.0%

980,094

(112,011)

868,084

(43.404)

824,679

700,067

84,008

(840,081)

768,674

-5.0%

-5.0%

25.0%

3.0%

-30.0%

16.2%

2,800,270 2,744,264

2030E

-2.0%

35.0%

-4.0%

960,492

(109.771)

850,722

(42.536)

808,186

686.066

82,328

(686,066)

890.514

-5.0%

-2.0%

25.0%

3.0%

-25.0%

15.9%

2031E

3.0%

35.0%

-4.0%

2,826,592

989,307

(113,064)

876,244

(43.812)

832,431

706.648

84,798

(706,648)

917,229

Free Cash Yield

Terminal EV/EBITDA

Terminal P/E

-5.0%

3.0%

25.0%

3.0%

-25.0%

3.0%

Terminal Value 17.546,227

2032E

12.0%

35.0%

-4.0%

3,165,783

1,108,024

(126,631)

981,393

(49.070)

932,323

791.446

94,973

(791,446)

1.027.297

-5.0%

12.0%

25.0%

3.0%

-25.0%

12.0%

5.85%

18.8

9.4

Why PDCE should be added to the portfolio

Added diversity of a midcap

Strong balance sheet

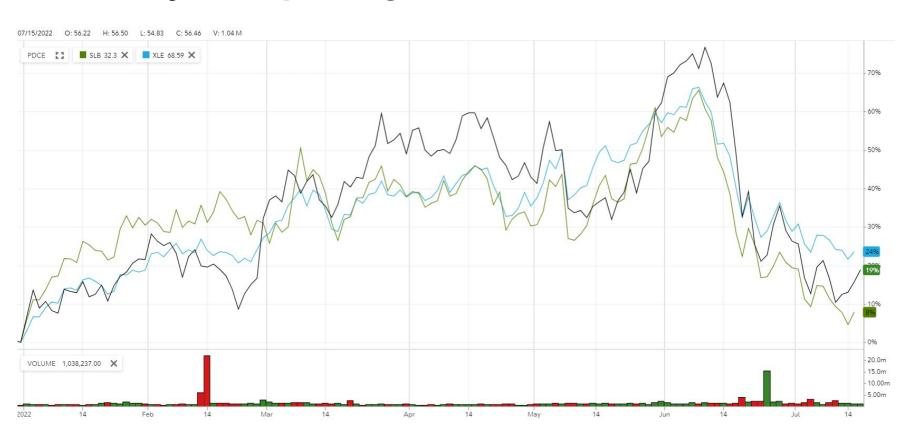
Committed to health, safety, and environment

Geographically diverse

Consensus sales growth of 93% in 2022 and 10% in 2023 Supposed to shrink by 1% in 2024

EPS consensus of \$14.19 in 2022, \$16.58 in 2023, and \$20.34 in 2024

Overlay comparing XLE, SLB, PDCE



Conclusion

Company	Current Price	Current Weighting	Current Weighting	Recommendation	Weight After Buy	Weight After	Target	Expected
	Current Price	(Sector)	(Portfolio)	Recommendation	(Sector)	Buy (Portfolio)	Price	Return
Chevron	\$146.51	16.96%	1.17%	Buy	12.71%	1.74%	\$161.16	10%
Conoco	\$83.11	37.43%	2.57%	Buy After Waiting	28.04%	3.15%	\$91.42	10%
Schlumberger	\$32.73	30.64%	2.11%	Buy	22.96%	2.68%	\$36.00	10%
PDC Energy	\$57.57	0.00%	0.00%	Buy	6.27%	0.58%	\$63.33	10%

Sources

- -https://communityfirstfoundation.org/environmental-social-and-governance-investing/
- -https://www.conocophillips.com/about-us/
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