

July 6, 2018

Chevron Corporation (CVX) Oil Value Upside

Symbol	CVX	Ebitda Next Twelve Months ending 6/30/19 (US\$mm)	42,500
Rating		Natural Gas/Ebitda (%)	19
Price (\$/sh)	123.98	Natural Gas and Oil Production/Ebitda (%)	82
Pricing Date	7/5/18	Developed Reserves/Production NTM	7.1
Shares (mm)	1913	EV/Ebitda	7.1
Market Capitalization (\$mm)	237,000	PV/Ebitda	8.2
Debt (\$mm)	63,000	Undeveloped Reserves (%)	36
Enterprise Value (EV) (\$mm)	300,000	Natural Gas and Oil Ebitda (US\$/boe)	32.90
Present Value (PV) (\$mm)	350,000	Downstream Uplift (US\$/boe)	7.28
Net Present Value (\$/share)	150	Oil and Gas Ebitda Margin (%)	62
EV/Market Cap	1.26	Top Line/Ebitda (%)	3
McDep Ratio - EV/PV	0.86	Price/Earnings Next Twelve Months	15
Dividend Yield (%/year)	3.6	Indicated Annual Dividend (US\$/sh)	4.48
Note: Estimated cash flow and e	earnings tied to one	-year futures prices for oil and natural gas.	
Reported results may vary	widely from estin	nates. Estimated present value per share revised only infrequer	ıtly.
Estimated present value p	resumes a long-teri	m price for oil of US\$70 a barrel and natural gas, \$4.00 a millio	on btu.
For historical analysis of	CVX since 2002 se	ee <u>www.mcdep.com/1cvx.htm</u>	

Summary and Recommendation

The common stock of Global Integrated Oil Producer Chevron (CVX) has 21% appreciation potential to Net Present Value (NPV) of \$150 a share, the price we estimate would reflect a longterm unlevered rate of return of 7% a year at an oil price of \$70 a barrel. Facing new demand/supply uncertainty, oil price may be in a trend that carries it higher than the current level near \$70. Meanwhile, second quarter results to be reported on July 27, are likely to be strong considering that the U.S. benchmark oil price was up 40% from the same period a year ago (see table Operating and Financial Estimates on page 2). Particularly significant gains are expected from Australian LNG (liquefied natural gas) projects that reached 269 thousand barrels oil equivalent daily (mboed) net production in the first quarter on the way to 400 in a few more quarters. Almost all that LNG is sold on long-term contracts tied to the price of oil. Other gains are expected from shale oil in the Permian Basin that reached 252 mboed in the first quarter on the way to 650 at the end of 2022. McDep Ratio at 0.86 falls between closely ranked ExxonMobil (XOM) and Royal Dutch Shell (RDS) (see tables 1-4 on pages 3-6). The three seem more similar than different. All pay an attractive dividend that is secure. European companies like RDS tend to pay a higher dividend, the American companies are more apt to buy back stock in addition to growing the dividend. CVX has increased its dividend for more than 30 consecutive years with the rate of growth 7% a year for the past 10 years. Seeing oil price back to normal and perhaps moving higher, CVX is poised to resume stock repurchase. We like Chevron stock along with its peers for enduring investment appeal.

Kurt H. Wulff, CFA



		N (T I	M (1	Chevron		· 1 E 4 4				
		Next Twer	ve Months	Operating	and Financ	ial Estimate	s			Next
										Twelve
	<i>Q2</i>	Year	<i>Q1</i>	Q2E	Q3E	Q4E	Year	<i>Q1E</i>	Q2E	Months
	6/30/17	2017	3/31/18	6/30/18	9/30/18	12/31/18	2018	3/31/19	6/30/19	6/30/19
Volume	0.00.0			0,00,20					0/0/0/0/	0.00.27
Natural Gas (mmcfd)										
U.S.	1,027	971	993	993	993	993	993	993	993	993
Rest of World	5,144	5,061	5,600	5,656	5,713	5,770	5,685	5,827	5,886	5,798
Total	6,171	6,032	6,593	6,649	6,706	6,763	6,678	6,820	6,879	6,791
Days	91	365	90	91	92	92	365	90	91	365
Oil (mmb)	159	629	154	157	160	162	633	160	163	646
Oil (mbd)	1,751	1,723	1,708	1,725	1,742	1,760	1,734	1,777	1,795	1,769
Total gas & oil (mmb)	253	996	253	258	263	266	1,039	262	268	1,059
Total gas & oil (mbd)	2,780	2,728	2,807	2,833	2,860	2,887	2,847	2,914	2,942	2,900
Price	2,700	2,720	2,007	2,055	2,000	2,007	2,017	2,711	2,712	_,> 0 0
Natural gas (\$/mcf)										
Henry Hub (\$/mmbtu)	3.18	3.11	3.01	2.80	2.92	2.97	2.92	3.08	2.66	2.91
U.S.	2.32	2.10	2.02	1.88	1.96	2.00	1.96	2.07	1.79	1.95
Rest of World	4.39	4.62	5.85	5.85	5.85	5.85	5.85	5.85	5.85	5.85
Total	4.05	4.02	5.27	5.26	5.27	5.28	5.27	5.30	5.26	5.28
Oil (\$/bbl)	4.05		5.21	5.20	5.21	5.20	5.21	5.50	5.20	5.20
WTI Cushing	48.26	50.94	62.88	67.86	73.59	70.19	68.63	68.19	66.55	69.63
Worldwide	43.87	47.99	59.65	64.38	69.80	66.58	65.17	64.69	63.13	66.04
Total gas & oil (\$/bbl)	36.62	39.62	48.69	51.53	54.89	52.97	52.06	51.86	50.83	52.63
Revenue (\$mm)	50.02	39.02	46.09	51.55	54.69	32.97	32.00	51.60	30.85	52.05
Natural Gas	217	745	101	170	170	192	712	105	171	708
U.S.	217		181	170	179	182	12,139	185	161	12,381
Rest of World	2,055	8,529	2,948	3,011	3,074	3,105	· · · · · ·	3,068	3,133	
Total	2,272	9,274	3,129	3,181	3,254	3,288	12,851	3,253	3,295	13,089
Oil	6,991	30,179	9,170	10,106	11,189	10,780	41,244	10,348	10,312	42,629
Other	25,217	102,269	25,465	25,465	25,465	25,465	101,862	25,465	25,465	101,862
Total	34,480	141,722	37,764	38,752	39,908	39,533	155,957	39,066	39,072	157,579
Expense		16.000					20 52 (4 0 0 0		20.011
Production	4,124	16,829	4,795	5,157	5,262	5,312	20,526	4,983	5,354	20,911
Other	22,700	94,284	23,762	23,762	23,762	23,465	94,751	23,465	23,465	94,158
Ebitda (\$mm)						-				
Exploration and Production	5,139	22,624	7,503	8,130	9,181	8,755	33,570	8,618	8,253	34,807
Other	2,517	7,986	1,704	1,704	1,704	2,000	7,111	2,000	2,000	7,704
Total Ebitda	7,656	30,610	9,207	9,834	10,884	10,755	40,680	10,618	10,253	42,510
Exploration	125	864	158	158	158	158	632	150	150	616
Deprec., Deplet., & Amort.	4,881	18,919	4,289	5,100	5,200	5,300	19,889	5,000	5,100	20,600
Ebit	2,650	10,827	4,760	4,576	5,526	5,297	20,159	5,468	5,003	21,294
Interest	-	-	159	159	159	159	636	159	159	636
Ebt	2,650	10,827	4,601	4,417	5,367	5,138	19,523	5,309	4,844	20,658
Income Tax	928	3,789	966	927	1,127	1,079	4,100	1,115	1,017	4,338
Net Income (\$mm)										
Exploration and Production	1,057	5,096	3,352							
Other	1,192	3,469	717							
Unallocated	(526)	(1,528)	(434)							
Total	1,723	7,037	3,635	3,489	4,240	4,059	15,423	4,194	3,827	16,320
Shares (millions)	1,893	1,897	1,913	1,913	1,913	1,913	1,913	1,913	1,913	1,913
Per share (\$)	0.91	3.71	1.90	1.82	2.22	2.12	8.06	2.19	2.00	8.53
Ebitda Margin (E&P)	55%	57%	61%	61%	64%	62%	62%	63%	61%	62%
Tax Rate	35%	35%	21%	21%	21%	21%	21%	21%	21%	21%
Dividend	1.08	4.32	1.12	1.12	1.12	1.12	4.48	1.12	1.12	4.48



July 6, 2018

			Table	1								
		Μ	cDep Ener	gy Stocks								
			-		0							
Ranked by McDep Ratio												
										1		
		. .						0.7	D.			
		Price						Oil	Dist.			
	<u>a</u> L L/D .	(US\$/sh)	Market	Enterprise	EV/	EV/		Prod'n/	Yield			
	Symbol/Ratin	0	Cap	Value	Market	Ebitda	Ebitda	Ebitda	NTM	Ratio		
¥ /		2018	(US\$mm)	(\$mm)	Сар	NTM	NTM	(%)	(%)	(EV/PV)		
Integrated	VOM	02.21	252.000	442.000	1.00	0.1	0.7	50	4.0	0.02		
Exxon Mobil Corporation	XOM	82.31	352,000	442,000	1.26	8.1	8.7	50	4.0	0.93		
Chevron Corporation	CVX	123.98	237,000	300,000	1.26	7.1	8.2	63	3.6	0.86		
Suncor Energy	SU	40.97	67,000	86,000	1.28	6.7	7.8	79	2.7	0.85		
Royal Dutch Shell	RDS-B	72.21	303,000	419,000	1.39	6.8	8.7	51	5.2	0.78		
Total or Median			959,000	1,247,000	1.27	6.9	8.4	57	3.8	0.86		
Large Independent												
Occidental Petroleum Corp.	OXY	84.21	64,600	78,300	1.21	8.2	7.5	80	3.7	1.10		
EOG Resources, Inc.	EOG	123.22	73,700	80,800	1.10	8.0	8.3	91	0.5	0.95		
Pioneer Natural Resources	PXD	183.33	31,400	34,000	1.08	7.5	8.1	94	0.0	0.92		
ConocoPhillips	COP	68.94	82,000	105,000	1.28	7.1	8.0	77	1.7	0.89		
Total or Median			251,700	298,100	1.15	7.7	8.0	85	1.1	0.94		
Mid-Size Independent												
Hess Corporation	HES	66.38	20,500	28,900	1.41	10.9	9.6	89	1.5	1.14		
Continental Resources	CLR	61.90	23,200	29,500	1.27	7.5	8.3	83	-	0.91		
Devon Energy Corporation	DVN	43.99	23,200	28,200	1.22	7.4	9.7	86	0.7	0.77		
Cimarex Energy Company	XEC	98.58	9,400	10,900	1.16	5.7	7.7	82	0.6	0.73		
Marathon Oil Corporation	MRO	20.70	17,640	24,400	1.38	4.9	8.1	90	1.0	0.60		
Total or Median			93,900	121,900	1.27	7.4	8.3	86	0.7	0.77		
Small Independent												
California Resources	CRC	44.68	2,100	8,400	4.1	5.9	7.6	92	-	0.77		
Whiting Petroleum Corporation	WLL	51.25	4,700	8,000	1.72	4.7	7.2	97	-	0.64		
Range Resources	RRC	16.64	4,100	8,800	2.13	6.0	10.0	46	0.5	0.60		
Birchcliff Energy Ltd.	BIREF	3.56	1,000	1,600	1.65	4.9	9.4	50	2.1	0.52		
Total or Median			11,900	26,800	1.93	5.4	8.5	71	0.2	0.62		
Income												
Sabine Royalty Trust	SBR	46.37	680	680	1.00	12.5	13.5	71	8.0	0.93		
Permian Basin RT	PBT	9.24		430	1.00	11.1	12.0	80	9.0	0.92		
Dorchester Minerals, L.P.	DMLP	19.65	640	640	1.00	9.0	10.9	84	9.5	0.82		
San Juan Basin Royalty Trust	SJT	6.06	280	280	1.00	12.2	16.1	-	8.1	0.76		
Cross Timbers Royalty Trust	CRT	14.42	90	90	1.00	7.3	12.7	37	11.4	0.58		
Total or Median			2,100	2,100	1.00	11.1	12.7	71	9.0	0.82		

 EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation, amort.
 Estimated Ebitda (cash flow) tied to NTM futures prices for oil and natural gas. NTM = Next Twelve Months ending 6/30/19.

 Estimated Present Value (PV) presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.00 a million btu.
 Estimated Present Value (PV)

McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses. For historical research see www.mcdep.com



			Tabl	le 2										
		McI	Dep Ene	rgy Sto	ocks									
	I	nlever	ed Cash	Flow	Ebitda)								
	Ranked by Total Ebitda													
			-											
		Price		Upstrea			Down-	Total						
		(US\$/sh)		Equiv.	Ebitda		stream		Distrib./	Distrib				
Sy	mbol/Rating	5-Jul	Volume	Price	Margin	Ebitda	Uplift	NTM	Ebitda	NTM				
• · · · •		2018	(mmboe)	(\$/boe)	(%)	(\$/boe)	(\$/boe)	(\$mm)	(%)	(\$/sh)				
Integrated	DDG D		1050	1. 60	-									
Royal Dutch Shell	RDS-B	72.21	1370	47.69	70	33.20	11.68	45,482	26	3.76				
Exxon Mobil Corporation	XOM	82.31	1450	51.11	51	26.10	11.68	37,858	26	3.28				
Chevron Corporation	CVX	123.98	1058	52.63	63	32.90	7.28	34,807	20	4.48				
Suncor Energy	SU	40.97	300	60.02	57	34.12	9.15	10,220	14	1.10				
Total or Median			4178	51.87	60	33.05	10.42	128,367	23					
Large Independent														
ConocoPhillips	COP	68.94	458	50.23	64	32.20	0.00	14,753	9	1.14				
EOG Resources, Inc.	EOG	123.22	280	48.76	74	36.26	0.00	10,158	3	0.56				
Occidental Petroleum Corp.	OXY	84.21	262	50.30	60	30.30	6.10	7,943	25	3.08				
Pioneer Natural Resources	PXD	183.33	124	49.50	74	36.60	0.00	4,552	0	0.08				
Total or Median			1125	49.87	69	34.23	0.00	37,406	6					
Mid-Size Independent														
Marathon Oil Corporation	MRO	20.70	167	43.05	70	30.10	0.00	5,015	3	0.20				
Continental Resources	CLR	61.90	108	44.76	81	36.40	0.00	3,940	-	-				
Devon Energy Corporation	DVN	43.99	209	31.19	58	18.20	0.00	3,799	4	0.32				
Hess Corporation	HES	66.38	97	47.21	58	27.20	0.00	2,649	12	1.00				
Cimarex Energy Company	XEC	98.58	86	32.28	69	22.20	0.00	1,919	3	0.64				
Total or Median			667	43.05	69	27.20	0.00	17,322	3					
Small Independent														
Whiting Petroleum Corporation	WLL	51.25	50	50.84	68	34.80	0.00	1,725	-	-				
Range Resources	RRC	16.64	139	19.53	54	10.50	0.00	1,457	1	0.08				
California Resources	CRC	44.68	50	55.41	52	28.80	0.00	1,428	-	-				
Birchcliff Energy Ltd.	BIREF	3.56	22	19.35	74	14.40	0.00	324	6	0.08				
Total or Median			260	35.19	61	21.60	0.00	4,933	1					
Income														
Dorchester Minerals, L.P.	DMLP	19.65	2.34	41.33	73	30.23	0.00	71	85	1.87				
Sabine Royalty Trust	SBR	46.37	1.76	35.53	86	30.65	0.00	54	100	3.70				
Permian Basin RT	PBT	9.24	1.22	47.62	67	31.98	0.00	39	99	0.83				
San Juan Basin Royalty Trust	SJT	6.06	3.73	12.23	51	6.21	0.00	23	98	0.49				
Cross Timbers Royalty Trust	CRT	14.42	0.43	42.78	64	27.38	0.00	12	83	1.64				
Total or Median			9	41.33	67	30.23	0.00	199	98					
For historical research see www.mcdep.	com													



			Tab	le 3						
		McD	en Ene	ergy Sto	cks					
		Net Pre				ro				
	-		sent va		SIIA					
						1				
		Price				Devel.	Undev/	Nat	Тор	Net
		(US\$/sh)				Resrvs/	Devel.	Gas/	Line/	Present
Sum	bol/Rating	(US\$/Sh) 5-Jul	Shares	Debt	P/E	Prod	Resrvs	Ebitda		Value
Sym	001/Kuing	2018	(mm)	(\$mm)		NTM	(%)	(%)	(%)	(US\$/sh)
Integrated		2010	(1111)	(\$1111)	1 1 1 1 1 1	11111	(70)	(70)	(70)	(03\$/311)
Chevron Corporation	CVX	123.98	1.913	62.659	15	7.1	57	23		150.00
Royal Dutch Shell	RDS-B	72.21	4,189	116,710	11	7.2	22	31		100.00
Exxon Mobil Corporation	XOM	82.31	4,270	90,941	13	9.6	52	28		90.00
Suncor Energy	SU	40.97	1,644	19.077	10	8.5	87	20		50.00
Median	50	10.97	1,011	17,077	10	7.9	55			50.00
Large Independent						1.2				
Pioneer Natural Resources	PXD	183.33	171	2.600	18	7.3	9	6		200.00
EOG Resources. Inc.	EOG	123.22	598	7,071	18	4.9	43	10		130.00
ConocoPhillips	COP	68.94	1,186	23,143	13	7.7	31	23		80.00
Occidental Petroleum Corp.	OXY	84.21	767	13,700	15	7.4	35	4		75.00
Median	0111	01.21	101	15,700	10	7.3	33			10.00
Mid-Size Independent						7.5	55			
Cimarex Energy Company	XEC	98.58	96	1,498	10	4.8	35	18		140.00
Continental Resources	CLR	61.90	374	6,333	19	5.6	121	17		70.00
Devon Energy Corporation	DVN	43.99	528	5,000	16	8.3	24	14		60.00
Hess Corporation	HES	66.38	310	8,399	10	7.4	59	11		55.00
Marathon Oil Corporation	MRO	20.70	852	6,734	10	5.4	60	10		40.00
Median	linco	20.70	0.52	0,751	10	5.6	59	10		10.00
Small Independent						5.0	57			
Whiting Petroleum Corporation	WLL	51.25	91	3,367	18	6.8	84	3		100.00
California Resources	CRC	44.68	46	6,300		8.9	41	8		100.00
Range Resources	RRC	16.64	247	4,657	13	10.0	83	54		40.00
Birchcliff Energy Ltd.	BIREF	3.56	268	621	12	7.2	228	50		9.00
Median						8.0	83			
Income										
Sabine Royalty Trust	SBR	46.37	15	-	13	10.1	3	37	100	50.00
Cross Timbers Royalty Trust	CRT	14.42	6	-	9	11.6	-	69	83	25.00
Dorchester Minerals, L.P.	DMLP	19.65	32	-	13	6.9	-	21	76	24.00
Permian Basin RT	PBT	9.24	47	-	11	6.7	-	21	41	10.00
San Juan Basin Royalty Trust	SJT	6.06	47	-	12	11.2	-	100	-	8.00
Median						10.1				
P/E = Stock Price to Earnings.	For histori	cal researcl	1 see www	.mcdep.coi	n.					



		Tab							
	Mc	Dep Ene	ergy Sto	cks					
	Total R	eturn Ye	ar-to-D	ate 201	8				
	Ranked b								
		Price	Price			Equity	U_{i}	nlevered	
		(\$/sh)	(\$/sh)	Price	Cash	Total		Total	
	Symbol/Rati	5-Jul	29-Dec		Distrib.	Return	Debt	Return	McDep
		2018	2017	(%)	(%)	(%)	(\$/sh)	(%)	Ratio
Integrated									
Suncor Energy	SU	40.97	36.72	12	2	13	12	10	0.85
Royal Dutch Shell	RDS-B	72.21	68.29	6	3	8	28	6	0.78
Chevron Corporation	CVX	123.98	125.19	(1)	2	1	33	1	0.86
Exxon Mobil Corporation	XOM	82.31	83.64	(2)	2	0	21	0	0.93
Median				2		5		3	0.86
Large Independent									
ConocoPhillips	COP	68.94	54.89	26	1	27	20	20	0.89
Occidental Petroleum Corp.	OXY	84.21	73.66	14	2	16	18	13	1.10
EOG Resources, Inc.	EOG	123.22	107.91	14	0	15	12	13	0.95
Pioneer Natural Resources	PXD	183.33	172.85	6	0	6	15	6	0.92
Median				14		15		13	0.94
Mid-Size Independent									
Hess Corporation	HES	66.38	47.47	40	1	41	27	26	1.14
Marathon Oil Corporation	MRO	20.70	16.93	22	1	23	8	16	0.60
Continental Resources	CLR	61.90	52.97	17	-	17	17	13	0.91
Devon Energy Corporation	DVN	43.99	41.40	6	0	7	9	5	0.77
Cimarex Energy Company	XEC	98.58	122.01	(19)	0	(19)	16	(17)	0.73
Median				17		17		13	0.77
Small Independent									
Whiting Petroleum Corporation	WLL	51.25	26.48	94	-	94	37	39	0.64
California Resources	CRC	44.68	19.44	130	-	130	137	16	0.77
Birchcliff Energy Ltd.	BIREF	3.56	3.50	2	1	3	2	2	0.52
Range Resources	RRC	16.64	17.06	(2)	0	(2)	19	(1)	0.60
Median				48		48		9	0.62
Income									
Dorchester Minerals, L.P.	DMLP	19.65	15.20	29	5	35	-	35	0.82
Permian Basin RT	PBT	9.24	8.87	4	4	8	-	8	0.92
Sabine Royalty Trust	SBR	46.37	44.60	4	3	7	-	7	0.93
Cross Timbers Royalty Trust	CRT	14.42	14.69	(2)	4	3	-	3	0.58
San Juan Basin Royalty Trust	SJT	6.06	8.24	(26)	3	(23)	-	(23)	0.76
Median				4		7		7	0.82
Grand Median				6		8		8	0.84
Natural Gas (\$/mmbtu)		2.83	2.95	(4)					
Oil -West Texas Intermediate (\$/bbl)		72.99	60.09	21					
Total Stock Market - U.S.	VTI	141.60	137.25	3	1	4			
Developed Markets - ex US	VEA	42.80	44.86	(5)	2	(3)			
Emerging Markets	VWO	41.74	45.91	(9)	1	(8)			
Total Stock Market - World	VT	73.61	74.26	(1)	1	0			



July 6, 2018

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