

CVX/XOM

Raising PTs and Updating Estimates

We update our forecasts post earnings and are above consensus on EPS but below on CFPS. We raise our PTs and see slightly more upside to XOM. We forecast XOM's FCF/EV yield at a 1-1.5% premium to CVX through 2025. Even with our buyback assumptions significantly ramping, both companies approach 0% net debt by 2026 on strip.

CVX

- Q2'22 EPS above consensus, but CFPS and production below. At strip, our Q2'22 EPS is 6% above consensus while CFPS is 8% below. See within for further discussion on the moving pieces for CFPS. We are 3% below consensus on both oil and total Q1'22 production, which likely reflects higher sequential maintenance, PSC roll-off impacts, and our estimate of a slight decline in reported Permian production. See Figure 1 and Figure 3.
- Quarterly affiliate distribution assumptions. We are updating our affiliate earnings and distribution estimates to be on a quarterly basis. See Figure 2 for details. For Q2'22, we forecast a modest distribution increase to \$702mm from \$644mm. For the full year, our \$4bn distribution estimate includes an assumed \$1.25bn TCO distribution in Q4'22 and implies full year earnings in excess of distributions of ~\$5bn. Our FY'22 distribution estimate of \$4bn exceeds the high-end of the \$2-3bn guidance range.

XOM

- EPS above consensus, but CFPS slightly below. Our updated Q2'22 EPS is 5% above consensus while our CFPS is 4% below. On production, our estimates are 1% below street for both oil and total production. See Figure 4.
- Permian update. We forecast Q2'22 Permian production of 576mboe/d vs. the reported March rate of 560 MBOE/d, and FY'22 avg. Permian production also at 576mboe/d or in-line with guidance of ~575 MBOE/d. We reduce our estimated Permian oil percentage to 55% from 60% previously, which is more aligned with the US liquid production breakdown provided in XOM's 10-K. See Figure 6 for our annual Permian estimates for total production and net completions.

Estimates suggest a yield premium for XOM; buyback forecast. A combination of CVX out performance and strengthening refining margins (which disproportionately benefits XOM) since mid-February has driven our forecasted XOM yields above CVX by 1.5% for 2022 and 1.3% on avg. between 2022 and 2025 on an EV basis (strip pricing). See Figure 8 for a comparison of our 2022-2025 FCF/EV yields and XOM's yield premium. Also, see Figure 9 and Figure 10 for our annual buyback assumptions through 2027.

Barclays Capital Inc. and/or one of its affiliates does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Please see analyst certifications and important disclosures beginning on page 13. Completed: 29-May-22, 23:47 GMT Released: 31-May-22, 09:15 GMT Restricted - External

CORE

U.S. Integrated Oil & E&P POSITIVE

Unchanged

U.S. Integrated Oil & E&P

Jeanine Wai

+1 212 526 3557 jeanine.wai@barclays.com BCI, US

Eli Bauman, CFA +1 212 526 6972 eli.bauman@barclays.com BCI, US

Kane Chen +1 212 526 6180 kane.chen@barclays.com BCI, US **Ratings and price targets.** For CVX, we reiterate our OW rating and raise our PT to \$196 from \$183 driven by a reduction in the baseline SPY yield, to which we apply CVX's 2010 - 2019 dividend yield premium average. For XOM, we reiterate our OW rating and raise our PT to \$111 from \$98 PT driven by a reduction in the baseline SPY yield, to which we apply a 75bp premium to XOM's 2010 - 2019 dividend yield premium average, which is down from our prior 1% premium assumption.

Summary of our Ratings, Price Targets and Earnings Changes in this Report (all changes are shown in bold)

	Rat	ting	Price	Р	rice Targ	et	E	PS FY1 (I	Ε)	E	PS FY2 (I	E)
Company	Old	New	27-May- 22	Old	New	%Chg	Old	New	%Chg	Old	New	%Chg
U.S. Integrated Oil & E&P	Pos	Pos										
Chevron Corporation (CVX)	OW	OW	178.28	183.00	196.00	7	14.73	16.88	15	11.13	11.35	2
Exxon Mobil Corporation (XOM)	OW	OW	97.59	98.00	111.00	13	9.75	10.27	5	7.26	7.54	4

Source: Barclays Research. Share prices and target prices are shown in the primary listing currency and EPS estimates are shown in the reporting currency. FY1(E): Current fiscal year estimates by Barclays Research. FY2(E): Next fiscal year estimates by Barclays Research. Stock Rating: OW: Overweight; EW: Equal Weight; UW: Underweight; RS: Rating Suspended Industry View: Pos: Positive; Neu: Neutral; Neg: Negative

Valuation Methodology and Risks

U.S. Integrated Oil & E&P

Chevron Corporation (CVX / CVX)

Valuation Methodology: Our \$196 12-month price target assumes CVX dividend yield is in-line with its historical delta vs. the S&P given line of sight to ~0% net debt/cap and measurable progress on renewables with RNG and biofuels, and implies \$196/share.

Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: Risks to our price target include lower than anticipated commodity prices, operational issues associated with long lead time, highly technical development projects, and contract risk associated with production sharing contracts and licenses with sovereign governments.

Exxon Mobil Corporation (XOM / XOM)

Valuation Methodology: Our \$111 price target is based on application of a 75 basis point premium to XOM's 2010 - 2019 1.3% yield premium to the S&P 500, or a total implied 3.4% dividend yield on estimated 2023 dividend of \$3.7/sh dividend.

Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: Risks to our price target include lower than anticipated commodity prices, operational issues associated with long lead time, highly technical development projects, and contract risk associated with production sharing contracts and licenses with sovereign governments.

Source: Barclays Research

Chevron

Updated Q2'22 estimates; EPS above, CFPS and production below consensus

Our updated 2Q'22 EPS of \$4.83 is 6% above consensus likely at least partially due to current strip natural gas prices and QTD refining margin strength. However, our \$5.69 CFPS forecast is 8% below consensus. See Figure 1 for a comparison of Barclays vs. consensus estimates.

Regarding, CFPS we note that our estimate is based on pre-working capital CFO of \$11.7bn while consensus may be based on a post-working capital number that includes some reversal of Q1'22's \$937mm working capital build. As discussed below, we assume a marginal increase in Q2 affiliate distributions (\$702mm in Q2'22 vs. \$644mm in Q1'22). Our FY'22 distribution forecast of \$4bn assumes a \$1.25 TCO distribution in Q4'22 and is \$1bn above the high-end of the company's original \$2-3bn guidance range and roughly in-line with company commentary on its Q1'22 conference call. See Figure 2 for details of our 2022 and 2023-2025 affiliate distributions. To the extent consensus reflects an annualized affiliate distribution estimate, Q2'22 may represent an over-estimation of the quarterly distribution. Our pre-working capital CFO estimate assumes US cash tax is added back at the ratio implied by Q1'22 reported deferred tax, which is then reversed as an increase in working capital per company commentary on its Q1'22 conference call.

Production below consensus, likely reflecting PSC and maintenance impacts

Our Q2'22 oil and total production estimates are each 3% below consensus, and likely reflect the combined impact of higher maintenance (120 MBOE/d sequentially) and the Rokan PSC rolloff (50 MBOE/d). In addition, our Permian production forecast is slightly down in Q2'22 to 679 MBOE/d due to depletion of excess DUCs and assumed absence of non-ratable joint venture volume bookings that boosted both Q4'21 and Q1'22 production, before ramping in H2'22 and driving FY'22 growth 14%.

FIGURE 1. CVX estimates: at strip pricing, our Q2'22 EPS is 6% above while CFPS is 8% below consensus

cvx		2Q22			3Q22			2022	
	Barclays	Consensus	Delta	Barclays	Consensus	Delta	Barclays	Consensus	Delta
Liquids Production (MBO/d)	1706	1758	-3%	1752	1819	-4%	1741	1788	-3%
Total Production (MBOE/d)	2889	2976	-3%	2967	3052	-3%	2969	3044	-2%
Capex (\$mm)*	3,256	2,969	10%	3,103	2,934	6%	10,878	11,767	-8%
Barclays Price Deck									
EPS	4.79	4.50	6%	5.35	4.42	21%	18.11	15.73	15%
CFPS	6.04	6.60	-8%	6.32	6.52	-3%	23.37	23.70	-1%
Pre- Dividend FCF (\$mm)	8,462	9,685	-13%	9,051	9,441	-4%	34,154	31,990	7%

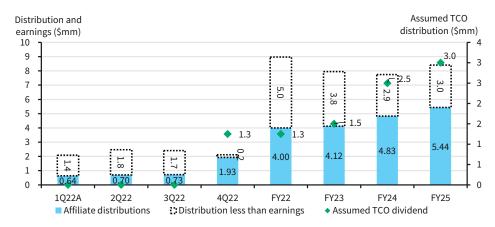
Source: Barclays research, Bloomberg; *Barclays capex estimates represent cash capex and includes \$600mm related to the Bunge JV agreement;

Affiliate distribution estimates

Given CVX's significant affiliate ownership, particularly through CPChem and TCO, the timing and size of payouts has been a source of cash flow variance between our estimates and consensus as the commodity rebound has increased the relevance of affiliate distributions. Below we show our formalized estimates for affiliate earnings and distributions on a quarterly basis (compared to previously we only estimated on an annual basis) along with our TCO distribution assumptions.

We estimate 2022 affiliate earnings of \$9.0bn and affiliate distributions of \$4.0bn, inclusive of a \$1.25bn dividend from TCO in Q4'22. See the Figure 2 below.

FIGURE 2. We model total 2022 affiliate distributions of ~\$4bn, or \$1bn above the high end of the 2022 guidance range (\$2-3bn)



Source: Company reports, Barclays Research

Downstream coming on strong

As shown in Figure 7, we model sequential margin improvement of \$13, \$9, and \$10 in CVX's key Gulf Coast, California, and Asia downstream regions, respectively, and assume an essentially flat environment through the remainder of the quarter. For the year, while our estimates reflect a slight softening, the dynamic of reduced Russian product and feedstock exports plus elevated European refinery operating costs on top of already anemic distillate inventories are likely to force gasoline to compete with diesel into the summer thereby sustaining refining margins through Q3.

Outside of core margin improvement, our Q2'22 downstream forecasts assume a 65% capture of *incremental estimated refining margins* related to lagging secondary product prices and crude/product backwardation. Although it's not possible to determine margin capture on an absolute basis for the majors, we note that Valero (VLO, covered by Theresa Chen) captured 89% and 77% of company calculated Gulf Coast index margins in 2021 and Q1'22, respectively, and 76% and 69% of West Coast margins respectively. In addition, our estimates reflect the absence of Q1'22's \$405mm/\$252mm int'l/US timing headwinds, which are offset by a more modest estimated \$50mm headwind in Q2'22 as well as a modest 7% improvement in earnings contribution from CPChem.

FIGURE 3. Sequential earnings and financial estimates: CVX

	Q1'22A	Q2'22E	Delta (\$mm)	% Change
US Upstream	3,238	3,960	722	22%
Int'l Upstream	3,840	4,343	503	13%
US Downstream	486	1,172	686	141%
Int'l Downstream	(178)	458	636	357%
Corporate	(843)	(575)	268	-32%
Total (\$mm)	6,543	9,358	2,815	43%
CFO (ex WC)	8,992	11,814	2,822	31%
Post dividend FCF (cash capex)	4,281	5,799	1,518	35%
Net Debt	17,662	14,802	(2,860)	-16%
Net share buyback	(3,386)	2,500	5,886	na

Source: Barclays research; $^*Q1'22$ share buybacks are net of stock issued related to share based compensation and represent *1,255mm of gross share buybacks during the quarter

ExxonMobil

Updated Q2'22 estimates: EPS 5% above, CFPS and production slightly below consensus

Our updated Q2'22 EPS of \$3.01 is 5% above consensus and likely at least partially reflects current strip natural gas prices and QTD refining margin strength. However, our \$4.03 CFPS forecast is 4% below current consensus. We note that our CFPS estimate is based on preworking capital CFO of \$16.9bn. See Figure 4 for a comparison of Barclays vs. consensus estimates.

Production estimates slightly below consensus

Our Q2'22 total production estimate of 3,762 MBOE/d is up 2% sequentially, and our oil and total production estimates are each 1% below consensus. Our model does assume a negative 14 MBOE/d impact related to TCO production downtime, but that Sakhalin-2 volumes remain through Q3'22. In the 'Other Americas' segment we forecast 18% sequential volume growth due to return of weather-related Kearl downtime from Q1'22, the impact of the Liza-1 debottlenecking in Guyana, and ramp-up of Liza-2. Lastly, in the Permian we estimate Q2'22 production of 577 MBOE/d vs. the Q1'22 March rate of 560 MBOE/d, and FY'22 at 576 MBOE/d.

FIGURE 4. XOM estimates: at strip pricing, our Q2'22 EPS is 5% above while CFPS is 4% below consensus

va.									
ХОМ		2Q22			3Q22			2022	
	Barclays	Consensus	Delta	Barclays	Consensus	Delta	Barclays	Consensus	Delta
Liquids Production (MBO/d)	2,362	2,388	-1%	2,247	2377	-5%	2,288	2,378	-4%
Total Production (MBOE/d)	3,762	3,799	-1%	3,593	3,752	-4%	3,663	3,742	-2%
Capex (\$mm)*	4,269	4,518	-6%	4,569	4,590	0%	17,768	18,141	-2%
EPS	2.99	2.85	5%	3.19	2.63	21%	10.96	9.83	12%
CFPS	4.01	4.15	-4%	4.17	3.90	7%	15.22	15.08	1%
FCF (\$mm)**	12,536	12,778	-2%	12,770	12,212	5%	45,928	43,346	6%
FCF Yield (EV)							10%	10%	

Source: Barclays research, Bloomberg; Yield based on current EV

Downstream estimates

Please see Figure 5 for our sequential segment earnings estimates and Figure 7 for sequential regional refining margin assumptions. As noted above for CVX, our downstream estimates reflect the absence of negative Q1'22 MTM downstream impacts (\$800mm for XOM in Q1'22) as well as 65% capture of *incremental estimated refining margins* for the quarter. Although its not possible to determine margin capture on an absolute basis for the majors, we note that Valero (VLO, covered by Theresa Chen) captured 89% of company calculated Gulf Coast index margins in 2021 and 77% in Q1'22.

FIGURE 5. Sequential earnings and financial estimates: XOM

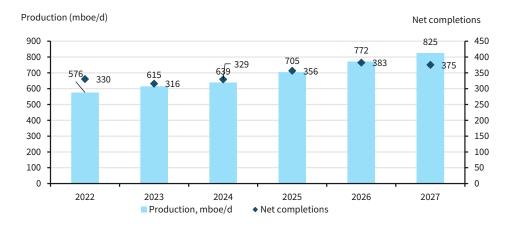
	1Q'22	2Q'22	Delta (\$mm)	% Change
Total Upstream	7,743	9,606	1,863	24%
Total Downstream	332	2,053	1,721	518%
Total Chemicals	1,354	1,563	209	15%
Corporate	(596)	(597)	(1)	0%
Total Earnings	8,833	12,625	3,792	43%
CFO (ex WC)	13,702	16,892	3,190	23%
FCF (cash capex)	5,550	8,674	3,124	56%
Net Debt	36,463	28,739	(7,724)	-21%

Source: Barclays Research, Company Reports

Re-calibrating in the Permian

We are re-calibrating our Permian standalone model to assume a 55% oil cut vs. 60% previously in order to more closely align US production with the liquids product breakdown disclosure in XOM's 10-K. However, from a higher level BOE perspective our estimates are relatively unchanged, with FY'22 production of 576 MBOE/d (in-line with guidance of ~575 MBOE/d). We forecast Permian production increasing to 705 MBOE/d by 2025, which is slightly above the high-end of the 550 - 675 MBOE/d guidance range provided at the company's most recent March analyst day.

FIGURE 6. Barclays estimates: XOM Permian production and net completions



Source: Barclays Research, Company Reports

Quarterly Regional Refining Margin Assumptions

FIGURE 7. Our models assume slight softening in Q3'22 margins before returning to more normalized levels in Q4'22

	2Q'22 Sequential margin change	3Q'22 Sequential margin change	4Q'22 Sequential margin change
Gulf Coast	\$12.50	(\$2.00)	(\$14.00)
Midwest	\$14.55	(\$1.84)	(\$16.39)
California	\$8.82	(\$3.09)	(\$13.86)
NW Europe	\$9.28	(\$2.43)	(\$5.89)
Singapore	\$10.28	(\$2.43)	(\$5.89)

Source: Barclays research, company reports

XOM Yield Premium

Despite recent out performance vs, CVX (5% over the past week and \sim 7% in the last month and +6%/19% vs. the S&P), XOM continues to trade at a 1 - 1.5% FCF/EV yield premium to CVX through 2025 based on our updated estimates at strip pricing. The current premium compares to mid-February when the companies traded at roughly equivalent yields and since which time CVX has outperformed XOM by 7% despite the refining margin outlook significantly improving to disproportionately benefit XOM's FCF outlook. While our estimates and buyback outlook continue to suggest a slightly stronger balance sheet for CVX, net debt/cap declines to under 10% for each company by YE'22 at strip and we think yield differentials should also compress assuming continued strength in commodity prices and refining margins.

FIGURE 8. Our estimates suggest a 1 - 1.5% FCF/EV yield premium for XOM through 2025 (strip pricing)

XOM yield premium

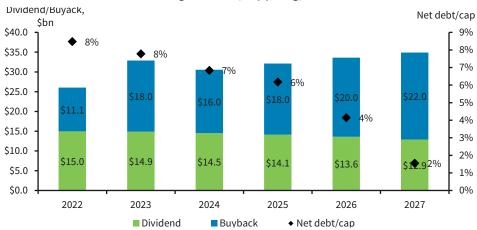
FCF EV yield 12% 1.6% **1.5%** 1.4% 10% 1.2% 1.1% 8% 1.1% 1.0% 1.0% 6% 0.8% 10% 0.6% 4% 7% 7% 7% 0.4% 2% 0.2% 0% 0.0% 2024 2025 2022 2023 ■ XOM CVX ◆ XOM EV yield premium

Source: Barclays research, Company Reports

Conservative buyback assumptions

Our dividend and buyback assumptions shown in Figures 9 and 10 are calibrated to maintain a net debt/cap level in the mid-teens through the forecast period for both CVX and XOM on our Barclays price deck (\$100/\$80/\$75/\$70/\$70/\$70 Brent in 2022 - 2027). As can be seen in the figures below, net debt/cap declines to 0%/1% for CVX/XOM at strip Brent pricing of 101/91/82/80/76/76 in 2022-2027, which suggests room for significant upside to shareholder returns if the strip comes to fruition.

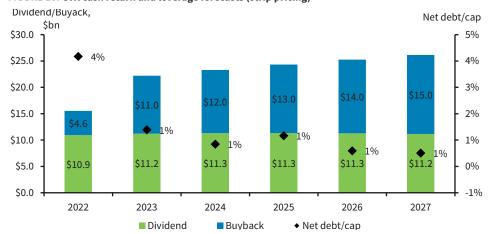
FIGURE 9. XOM cash return and leverage forecasts (strip pricing)



Source: Barclays research, Company reports

9 31 May 2022

FIGURE 10. CVX cash return and leverage forecasts (strip pricing)



Source: Barclays research, Company reports *CVX buyback estimates are net of shares issued under share based compensation plans, which totaled \$4.6bn in Q1'22. Q1'22 gross buybacks totaled ~\$1.3bn. 2022 buyback guidance is \$5-10bn.

J.S. Integrated Oil & E&P							POSITIVE
Chevron Corporation (CVX)							OVERWEIGHT
ncome statement (\$mn)	2021A	2022E	2023E	2024E	CAGR	Price (27-May-2022)	USD 178.28
BITDAX	41,491	61,647	46,728	46,489	3.9%	Price Target	USD 196.00
EBITDAX (adj)	41,474	61,931	46,728	46,489	3.9%	Why OVERWEIGHT?	
Net income (adj)	15,608	32,541	21,137	19,820	8.3%	We believe Chevron	
EPS (adj) (\$)	8.13	16.88	11.35	11.09	10.9%	to both grow produc	
Cash flow per share	15.9	22.3	17.4	18.4	5.0%	free cash flow to sha	
Diluted shares (mn)	1,919	1,927	1,862	1,787	-2.4%	the cycle and its Ene	rgy Strategy will
DPS (\$)	5.33	5.71	6.06	6.36	6.1%	begin to be recognize	ed by investors
Balance sheet and cash flow (\$mn)	2021A	2022E	2023E	2024E	CAGR	over the coming year	
Cash and equivalents	5,640	15,439	8,883	3,858	-11.9%	communication incr	
Total debt	31,369	24,583	19,833	18,833	-15.6%	also holds an advant position in the Perm	0 , ,
Shareholders' equity	139,940	156,952	155,932	152,507	2.9%	exploration upside in	,
Discretionary cash flow	30,548	43,053	32,440	32,950	2.6%	exploration upside ii	i tile Lasterii Meu.
Capital expenditure	-8,056	-10,878	-12,693	-13,961	N/A	Upside case	USD 216.00
Dividends paid	-10,215	-10,951	-11,228	-11,317	N/A	Our upside case assu	umes CVX trades in
ree cash flow	12,277	21,223	8,519	7,672	-14.5%	line with its 10 year yield premium to	
/aluation and leverage metrics	2021A	2022E	2023E	2024E	Average	the S&P.	
P/E (adj) (x)	21.9	10.6	15.7	16.1	16.1	Downside case	USD 118.00
EV/DACF (x)	18.8	13.1	17.1	16.7	16.4	Our downside case a	
CROIC (%)	18.5	26.4	19.9	20.0	21.2	trades in line with th	_
EV/EBITDAX (adj) (x)	14.2	9.2	12.1	12.1	11.9	yield premium to the	e S&P.
Net debt/EBITDAX (adj) (x)	0.6	0.1	0.2	0.3	0.3	Upside/Downside s	cenarios
「otal debt/capital (%)	12.6	10.6	8.7	8.5	10.1	Price History	Price Target
Dividend yield (%)	3.0	3.2	3.4	3.6	3.3	Prior 12 months High	Next 12 months Upside
FCF yield (%)	2.1	3.7	1.5	1.4	2.2	nigri	216.00
Selected operating metrics	2021A	2022E	2023E	2024E	Average	170 35 0	Target
Total production (000 boe/d)	3,074.2	2,972.3	3,044.1	3,198.6	3,072.3	178.35 Current 178.28	196.00
Oil production (000 BO/d)	1,814.3	1,744.5	1,819.7	1,954.3	1,833.2		
Natural gas prod (000 000 CF/d)	7,559.3	7,367.3	7,346.4	7,465.4	7,434.6		118.00
NGL production (000 B/d)	N/A	N/A	N/A	N/A	N/A	92.86	
oY production growth (%)	-0.29	-3.31	2.42	5.07	0.97	Low	Downside

Note: FY End Dec

Source: Company data, Bloomberg, Barclays Research

U.S. Integrated Oil & E&P							POSITIVE
Exxon Mobil Corporation (XOM)							OVERWEIGHT
Income statement (\$mn)	2021A	2022E	2023E	2024E	CAGR	Price (27-May-2022) USD 97.59
EBITDAX	54,792	86,363	68,005	67,218	7.1%	Price Target	USD 111.00
EBITDAX (adj)	54,845	89,716	68,005	67,218	7.0%	Why OVERWEIGHT	?
Net income (adj)	23,013	42,966	30,094	29,931	9.2%	-	XOM based on rate
EPS (adj) (\$)	5.38	10.27	7.54	7.92	13.7%	of change in chemi	
Cash flow per share (\$)	10.29	14.54	11.79	12.58	6.9%	downstream, rapid	
Diluted shares (mn)	4,275	4,184	3,990	3,780	-4.0%	potential sharehold	0 0
DPS (\$)	3.49	3.57	3.73	3.84	3.3%	medium term.	
Balance sheet and cash flow (\$mn)	2021A	2022E	2023E	2024E	CAGR	Upside case	USD 128.00
Cash and equivalents	6,802	20,179	10,372	4,878	-10.5%	Our upside scenari	o assumes a long-
Total debt	47,704	42,263	38,263	36,263	-8.7%	term oil price deck	O
Shareholders' equity	175,683	188,814	186,484	186,352	2.0%	our NAV, 5% service	e cost inflation, and
Discretionary cash flow	43,967	60,855	47,051	47,533	2.6%	downstream valua	tion based our 2022
Capital expenditure	-12,076	-17,768	-18,874	-19,468	N/A	post recovery EBIT	DA estimates.
Dividends paid	-15,148	-15,193	-15,128	-14,766	N/A	Downside case	USD 71.00
Free cash flow	14,972	26,879	12,194	12,505	-5.8%	Our downside scen	
Valuation and leverage metrics	2021A	2022E	2023E	2024E	Average	long-term oil price	
P/E (adj) (x)	18.1	9.5	12.9	12.3	13.2	0 .	cluding 10% service
EV/DACF (x)	10.2	7.1	9.3	9.3	9.0	cost deflation.	Ü
CROIC (%)	20.2	29.0	22.4	22.3	23.5	/5	
EV/EBITDAX (adj) (x)	8.3	4.9	6.5	6.7	6.6	Upside/Downside	scenarios
Net debt/EBITDAX (adj) (x)	0.7	0.2	0.4	0.5	0.5	Price History Prior 12 months	Price Target Next 12 months
Total debt/capital (%)	13.7	13.1	12.2	12.0	12.8	High	Upside
Dividend yield (%)	3.6	3.7	3.8	3.9	3.7		128.00
FCF yield (%)	3.3	6.1	2.7	2.8	3.7	97.93 Current	Target 111.00
Selected operating metrics	2021A	2022E	2023E	2024E	Average	97.59	
Total production (000 boe/d)	3,791.7	3,675.4	3,629.3	3,675.6	3,693.0		71.00
Oil production (000 BO/d)	2,290.2	2,295.3	2,303.5	2,402.5	2,322.9	52.10	
Natural gas prod (000 000 CF/d)	9,008.9	8,280.8	7,954.7	7,638.3	8,220.7	Low	Downside
NGL production (000 B/d)	N/A	N/A	N/A	N/A	N/A		
YoY production growth (%)	1.0	-3.1	-1.3	1.3	-0.5		

Note: FY End Dec

Source: Company data, Bloomberg, Barclays Research

Analyst(s) Certification(s):

I, Jeanine Wai, hereby certify (1) that the views expressed in this research report accurately reflect my personal views about any or all of the subject securities or issuers referred to in this research report and (2) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

Important Disclosures:

Barclays Research is produced by the Investment Bank of Barclays Bank PLC and its affiliates (collectively and each individually, "Barclays"). All authors contributing to this research report are Research Analysts unless otherwise indicated. The publication date at the top of the report reflects the local time where the report was produced and may differ from the release date provided in GMT.

Availability of Disclosures:

Where any companies are the subject of this research report, for current important disclosures regarding those companies please refer to https://publicresearch.barclays.com or alternatively send a written request to: Barclays Research Compliance, 745 Seventh Avenue, 13th Floor, New York, NY 10019 or call +1-212-526-1072.

The analysts responsible for preparing this research report have received compensation based upon various factors including the firm's total revenues, a portion of which is generated by investment banking activities, the profitability and revenues of the Markets business and the potential interest of the firm's investing clients in research with respect to the asset class covered by the analyst.

Analysts regularly conduct site visits to view the material operations of covered companies, but Barclays policy prohibits them from accepting payment or reimbursement by any covered company of their travel expenses for such visits.

Barclays Research Department produces various types of research including, but not limited to, fundamental analysis, equity-linked analysis, quantitative analysis, and trade ideas. Recommendations contained in one type of Barclays Research may differ from those contained in other types of Barclays Research, whether as a result of differing time horizons, methodologies, or otherwise.

In order to access Barclays Statement regarding Research Dissemination Policies and Procedures, please refer to https://publicresearch.barcap.com/S/RD.htm. In order to access Barclays Research Conflict Management Policy Statement, please refer to: https://publicresearch.barcap.com/S/CM.htm.

Primary Stocks (Ticker, Date, Price)

Chevron Corporation (CVX, 27-May-2022, USD 178.28), Overweight/Positive, CD/CE/D/E/GE/J/K/L/M/N

Exxon Mobil Corporation (XOM, 27-May-2022, USD 97.59), Overweight/Positive, CD/CE/E/J/K/L/M/N

Other Material Conflicts

The supervisory analyst who reviewed and approved this research report has a long position in the common stock of Chevron (CVX).

Unless otherwise indicated, prices are sourced from Bloomberg and reflect the closing price in the relevant trading market, which may not be the last available closing price at the time of publication.

Disclosure Legend:

A: Barclays Bank PLC and/or an affiliate has been lead manager or co-lead manager of a publicly disclosed offer of securities of the issuer in the previous 12 months.

B: An employee or non-executive director of Barclays PLC is a director of this issuer.

CD: Barclays Bank PLC and/or an affiliate is a market-maker in debt securities issued by this issuer.

CE: Barclays Bank PLC and/or an affiliate is a market-maker in equity securities issued by this issuer.

CH: Barclays Bank PLC and/or its group companies makes, or will make, a market in the securities (as defined under paragraph 16.2 (k) of the HK SFC Code of Conduct) in respect of this issuer.

D: Barclays Bank PLC and/or an affiliate has received compensation for investment banking services from this issuer in the past 12 months.

E: Barclays Bank PLC and/or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer within the next 3 months.

FA: Barclays Bank PLC and/or an affiliate beneficially owns 1% or more of a class of equity securities of this issuer, as calculated in accordance with US regulations.

FB: Barclays Bank PLC and/or an affiliate beneficially owns a long position of more than 0.5% of a class of equity securities of this issuer, as calculated in accordance with EU regulations.

FC: Barclays Bank PLC and/or an affiliate beneficially owns a short position of more than 0.5% of a class of equity securities of this issuer, as calculated in accordance with EU regulations.

FD: Barclays Bank PLC and/or an affiliate beneficially owns 1% or more of a class of equity securities of this issuer, as calculated in accordance with South Korean regulations.

FE: Barclays Bank PLC and/or its group companies has financial interests in relation to this issuer and such interests aggregate to an amount equal to or more than 1% of this issuer's market capitalization, as calculated in accordance with HK regulations.

GD: One of the Research Analysts on the fundamental credit coverage team (and/or a member of his or her household) has a long position in the common equity securities of this issuer.

GE: One of the Research Analysts on the fundamental equity coverage team (and/or a member of his or her household) has a long position in the common equity securities of this issuer.

H: This issuer beneficially owns more than 5% of any class of common equity securities of Barclays PLC.

I: Barclays Bank PLC and/or an affiliate is party to an agreement with this issuer for the provision of financial services to Barclays Bank PLC and/or an affiliate.

J: Barclays Bank PLC and/or an affiliate is a liquidity provider and/or trades regularly in the securities of this issuer and/or in any related derivatives.

K: Barclays Bank PLC and/or an affiliate has received non-investment banking related compensation (including compensation for brokerage services, if applicable) from this issuer within the past 12 months.

L: This issuer is, or during the past 12 months has been, an investment banking client of Barclays Bank PLC and/or an affiliate.

M: This issuer is, or during the past 12 months has been, a non-investment banking client (securities related services) of Barclays Bank PLC and/or an affiliate.

N: This issuer is, or during the past 12 months has been, a non-investment banking client (non-securities related services) of Barclays Bank PLC and/or an affiliate.

O: Not in use.

P: A partner, director or officer of Barclays Capital Canada Inc. has, during the preceding 12 months, provided services to the subject company for remuneration, other than normal course investment advisory or trade execution services.

Q: Barclays Bank PLC and/or an affiliate is a Corporate Broker to this issuer.

R: Barclays Capital Canada Inc. and/or an affiliate has received compensation for investment banking services from this issuer in the past 12 months.

S: This issuer is a Corporate Broker to Barclays PLC.

T: Barclays Bank PLC and/or an affiliate is providing equity advisory services to this issuer.

U: The equity securities of this Canadian issuer include subordinate voting restricted shares.

V: The equity securities of this Canadian issuer include non-voting restricted shares.

Risk Disclosure(s)

Master limited partnerships (MLPs) are pass-through entities structured as publicly listed partnerships. For tax purposes, distributions to MLP unit holders may be treated as a return of principal. Investors should consult their own tax advisors before investing in MLP units.

Disclosure(s) regarding Information Sources

Copyright © (2022) Sustainalytics. Sustainalytics retains ownership and all intellectual property rights in its proprietary information and data that may be included in this report. Any Sustainalytics' information and data included herein may not be copied or redistributed, is intended for informational purposes only, does not constitute investment advice and is not warranted to be complete, timely and accurate. Sustainalytics' information and data is subject to conditions available at https://www.sustainalytics.com/legal-disclaimers/

Bloomberg® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg") and the Bloomberg Indices are trademarks of Bloomberg. Bloomberg or Bloomberg's licensors own all proprietary rights in the Bloomberg Indices. Bloomberg does not approve or endorse this material, or guarantee the accuracy or completeness of any information herein, or make any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, Bloomberg shall have no liability or responsibility for injury or damages arising in connection therewith.

Guide to the Barclays Fundamental Equity Research Rating System:

Our coverage analysts use a relative rating system in which they rate stocks as Overweight, Equal Weight or Underweight (see definitions below) relative to other companies covered by the analyst or a team of analysts that are deemed to be in the same industry (the "industry coverage universe").

In addition to the stock rating, we provide industry views which rate the outlook for the industry coverage universe as Positive, Neutral or Negative (see definitions below). A rating system using terms such as buy, hold and sell is not the equivalent of our rating system. Investors should carefully read the entire research report including the definitions of all ratings and not infer its contents from ratings alone.

Stock Rating

Overweight - The stock is expected to outperform the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

Equal Weight - The stock is expected to perform in line with the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

Underweight - The stock is expected to underperform the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

Rating Suspended - The rating and target price have been suspended temporarily due to market events that made coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where the Investment Bank of Barclays Bank PLC is acting in an advisory capacity in a merger or strategic transaction involving the company.

Industry View

Positive - industry coverage universe fundamentals/valuations are improving.

Neutral - industry coverage universe fundamentals/valuations are steady, neither improving nor deteriorating.

Negative - industry coverage universe fundamentals/valuations are deteriorating.

Below is the list of companies that constitute the "industry coverage universe":

U.S. Integrated Oil & E&P

APA Corporation (APA)

ConocoPhillips (COP)

Devon Energy Corporation (DVN)

Exxon Mobil Corporation (XOM)

Occidental Petroleum Corporation (OXY)

SM Energy (SM)

Brigham Minerals, Inc. (MNRL)

Continental Resources, Inc. (CLR)

Diamondback Energy (FANG)

Hess Corporation (HES)

Ovintiv Inc. (OVV)

Viper Energy Partners LP (VNOM)

Chevron Corporation (CVX)

Coterra Energy (CTRA)

EOG Resources, Inc. (EOG)
Marathon Oil Corporation (MRO)

Pioneer Natural Resources Company (PXD)

Distribution of Ratings:

Barclays Equity Research has 1731 companies under coverage.

51% have been assigned an Overweight rating which, for purposes of mandatory regulatory disclosures, is classified as a Buy rating; 52% of companies with this rating are investment banking clients of the Firm; 70% of the issuers with this rating have received financial services from the Firm.

33% have been assigned an Equal Weight rating which, for purposes of mandatory regulatory disclosures, is classified as a Hold rating; 41% of companies with this rating are investment banking clients of the Firm; 68% of the issuers with this rating have received financial services from the Firm.

13% have been assigned an Underweight rating which, for purposes of mandatory regulatory disclosures, is classified as a Sell rating; 32% of companies with this rating are investment banking clients of the Firm; 64% of the issuers with this rating have received financial services from the Firm.

Guide to the Barclays Research Price Target:

Each analyst has a single price target on the stocks that they cover. The price target represents that analyst's expectation of where the stock will trade in the next 12 months. Upside/downside scenarios, where provided, represent potential upside/potential downside to each analyst's price target over the same 12-month period.

Top Picks:

Barclays Equity Research's "Top Picks" represent the single best alpha-generating investment idea within each industry (as defined by the relevant "industry coverage universe"), taken from among the Overweight-rated stocks within that industry. While analysts may highlight other Overweight-rated stocks in their published research in addition to their Top Pick, there can only be one "Top Pick" for each industry. To view the current list of Top Picks, go to the Top Picks page on Barclays Live (https://live.barcap.com/go/keyword/TopPicks).

To see a list of companies that comprise a particular industry coverage universe, please go to https://publicresearch.barclays.com.

Types of investment recommendations produced by Barclays Equity Research:

In addition to any ratings assigned under Barclays' formal rating systems, this publication may contain investment recommendations in the form of trade ideas, thematic screens, scorecards or portfolio recommendations that have been produced by analysts within Equity Research. Any such investment recommendations shall remain open until they are subsequently amended, rebalanced or closed in a future research report.

Barclays may also re-distribute equity research reports produced by third-party research providers that contain recommendations that differ from and/or conflict with those published by Barclays' Equity Research Department.

Disclosure of other investment recommendations produced by Barclays Equity Research:

Barclays Equity Research may have published other investment recommendations in respect of the same securities/instruments recommended in this research report during the preceding 12 months. To view all investment recommendations published by Barclays Equity Research in the preceding 12 months please refer to https://live.barcap.com/go/research/Recommendations.

Legal entities involved in producing Barclays Research:

Barclays Bank PLC (Barclays, UK)

Barclays Capital Inc. (BCI, US)

Barclays Bank Ireland PLC, Frankfurt Branch (BBI, Frankfurt)

Barclays Bank Ireland PLC, Paris Branch (BBI, Paris)

Barclays Bank Ireland PLC, Milan Branch (BBI, Milan)

Barclays Securities Japan Limited (BSJL, Japan)

Barclays Bank PLC, Hong Kong Branch (Barclays Bank, Hong Kong)

Barclays Capital Canada Inc. (BCCI, Canada)

Barclays Bank Mexico, S.A. (BBMX, Mexico)

Barclays Capital Casa de Bolsa, S.A. de C.V. (BCCB, Mexico)

Barclays Securities (India) Private Limited (BSIPL, India)

Barclays Bank PLC, India Branch (Barclays Bank, India)

Barclays Bank PLC, Singapore Branch (Barclays Bank, Singapore)

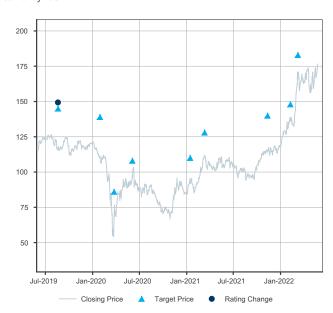
Barclays Bank PLC, DIFC Branch (Barclays Bank, DIFC)

Chevron Corporation (CVX / CVX)

Stock Rating: **OVERWEIGHT** Industry View: **POSITIVE USD 178.28** (27-May-2022)

Rating and Price Target Chart - USD (as of 27-May-2022)

Currency=USD



Source: IDC, Barclays Research

Link to Barclays Live for interactive charting

Publication Date	Closing Price*	Rating	Adjusted Price Target
09-Mar-2022	170.53		183.00
08-Feb-2022	138.55		148.00
11-Nov-2021	114.16		140.00
11-Mar-2021	111.19		128.00
14-Jan-2021	95.49		110.00
03-Jun-2020	97.18		108.00
24-Mar-2020	66.55		86.00
29-Jan-2020	110.37		139.00
19-Aug-2019	117.31	Overweight	145.00

Source: Bloomberg, Barclays Research

Historical stock prices and price targets may have been adjusted for stock splits and dividends.

CD: Barclays Bank PLC and/or an affiliate is a market-maker in debt securities issued by Chevron Corporation.

CE: Barclays Bank PLC and/or an affiliate is a market-maker in equity securities issued by Chevron Corporation.

D: Barclays Bank PLC and/or an affiliate has received compensation for investment banking services from Chevron Corporation in the past 12 months.

E: Barclays Bank PLC and/or an affiliate expects to receive or intends to seek compensation for investment banking services from Chevron Corporation within the next 3 months.

GE: One of the Research Analysts on the fundamental equity coverage team (and/or a member of his or her household) has a long position in the common equity securities of Chevron Corporation.

J: Barclays Bank PLC and/or an affiliate is a liquidity provider and/or trades regularly in the securities by Chevron Corporation and/or in any related derivatives.

^{*}This is the closing price referenced in the publication, which may not be the last available closing price at the time of publication.

K: Barclays Bank PLC and/or an affiliate has received non-investment banking related compensation (including compensation for brokerage services, if applicable) from Chevron Corporation within the past 12 months.

L: Chevron Corporation is, or during the past 12 months has been, an investment banking client of Barclays Bank PLC and/or an affiliate.

M: Chevron Corporation is, or during the past 12 months has been, a non-investment banking client (securities related services) of Barclays Bank PLC and/or an affiliate.

N: Chevron Corporation is, or during the past 12 months has been, a non-investment banking client (non-securities related services) of Barclays Bank PLC and/or an affiliate.

Valuation Methodology: Our \$196 12-month price target assumes CVX dividend yield is in-line with its historical delta vs. the S&P given line of sight to ~0% net debt/cap and measurable progress on renewables with RNG and biofuels, and implies \$196/share.

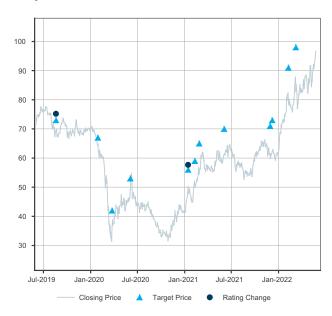
Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: Risks to our price target include lower than anticipated commodity prices, operational issues associated with long lead time, highly technical development projects, and contract risk associated with production sharing contracts and licenses with sovereign governments.

Exxon Mobil Corporation (XOM / XOM)

Stock Rating: **OVERWEIGHT**Industry View: **POSITIVE USD 97.59** (27-May-2022)

Rating and Price Target Chart - USD (as of 27-May-2022)

Currency=USD



Source: IDC, Barclays Research

Link to Barclays Live for interactive charting

Publication Date	Closing Price*	Rating	Adjusted Price Target
09-Mar-2022	87.78		98.00
08-Feb-2022	82.39		91.00
07-Dec-2021	62.27		73.00
29-Nov-2021	61.25		71.00
03-Jun-2021	61.18		70.00
26-Feb-2021	54.37		65.00
09-Feb-2021	50.63		59.00
14-Jan-2021	50.31	Overweight	56.00
03-Jun-2020	49.24		53.00
24-Mar-2020	35.44		42.00

29-Jan-2020 64.11 67.00 19-Aug-2019 69.45 Equal Weight 73.00

Source: Bloomberg, Barclays Research

*This is the closing price referenced in the publication, which may not be the last available closing price at the time of publication.

Historical stock prices and price targets may have been adjusted for stock splits and dividends.

CD: Barclays Bank PLC and/or an affiliate is a market-maker in debt securities issued by Exxon Mobil Corporation.

CE: Barclays Bank PLC and/or an affiliate is a market-maker in equity securities issued by Exxon Mobil Corporation.

E: Barclays Bank PLC and/or an affiliate expects to receive or intends to seek compensation for investment banking services from Exxon Mobil Corporation within the next 3 months.

J: Barclays Bank PLC and/or an affiliate is a liquidity provider and/or trades regularly in the securities by Exxon Mobil Corporation and/or in any related derivatives.

K: Barclays Bank PLC and/or an affiliate has received non-investment banking related compensation (including compensation for brokerage services, if applicable) from Exxon Mobil Corporation within the past 12 months.

L: Exxon Mobil Corporation is, or during the past 12 months has been, an investment banking client of Barclays Bank PLC and/or an affiliate.

M: Exxon Mobil Corporation is, or during the past 12 months has been, a non-investment banking client (securities related services) of Barclays Bank PLC and/or an affiliate.

N: Exxon Mobil Corporation is, or during the past 12 months has been, a non-investment banking client (non-securities related services) of Barclays Bank PLC and/or an affiliate.

Valuation Methodology: Our \$111 price target is based on application of a 75 basis point premium to XOM's 2010 - 2019 1.3% yield premium to the S&P 500, or a total implied 3.4% dividend yield on estimated 2023 dividend of \$3.7/sh dividend.

Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: Risks to our price target include lower than anticipated commodity prices, operational issues associated with long lead time, highly technical development projects, and contract risk associated with production sharing contracts and licenses with sovereign governments.

Disclaimer:

This publication has been produced by Barclays Research Department in the Investment Bank of Barclays Bank PLC and/or one or more of its affiliates (collectively and each individually, "Barclays").

It has been prepared for institutional investors and not for retail investors. It has been distributed by one or more Barclays affiliated legal entities listed below or by an independent and non-affiliated third-party entity (as may be communicated to you by such third-party entity in its communications with you). It is provided for information purposes only, and Barclays makes no express or implied warranties, and expressly disclaims all warranties of merchantability or fitness for a particular purpose or use with respect to any data included in this publication. To the extent that this publication states on the front page that it is intended for institutional investors and is not subject to all of the independence and disclosure standards applicable to debt research reports prepared for retail investors under U.S. FINRA Rule 2242, it is an "institutional debt research report" and distribution to retail investors is strictly prohibited. Barclays also distributes such institutional debt research reports to various issuers, media, regulatory and academic organisations for their own internal informational news gathering, regulatory or academic purposes and not for the purpose of making investment decisions regarding any debt securities. Media organisations are prohibited from re-publishing any opinion or recommendation concerning a debt issuer or debt security contained in any Barclays institutional debt research report. Any such recipients that do not want to continue receiving Barclays institutional debt research reports should contact debtresearch@barclays.com. Clients that are subscribed to receive equity research reports, will not receive certain cross asset research reports co-authored by equity and FICC research analysts that are distributed as "institutional debt research reports" unless they have agreed to accept such reports. Eligible clients may get access to such cross asset reports by contacting debtresearch@barclays.com. Barclays will not treat unauthorized recipients of this report as its clients and accepts no liability for use by them of the contents which may not be suitable for their personal use. Prices shown are indicative and Barclays is not offering to buy or sell or soliciting offers to buy or sell any financial instrument.

Without limiting any of the foregoing and to the extent permitted by law, in no event shall Barclays, nor any affiliate, nor any of their respective officers, directors, partners, or employees have any liability for (a) any special, punitive, indirect, or consequential damages; or (b) any lost profits, lost revenue, loss of anticipated savings or loss of opportunity or other financial loss, even if notified of the possibility of such damages, arising from any use of this publication or its contents.

Other than disclosures relating to Barclays, the information contained in this publication has been obtained from sources that Barclays Research believes to be reliable, but Barclays does not represent or warrant that it is accurate or complete. Barclays is not responsible for, and makes no warranties whatsoever as to, the information or opinions contained in any written, electronic, audio or video presentations of third parties that are accessible via a direct hyperlink in this publication or via a hyperlink to a third-party web site ('Third-Party Content'). Any such Third-Party Content has not been adopted or endorsed by Barclays, does not represent the views or opinions of Barclays, and is not incorporated by reference into this publication. Third-Party Content is provided for information purposes only and Barclays has not independently verified its accuracy or completeness.

The views in this publication are solely and exclusively those of the authoring analyst(s) and are subject to change, and Barclays Research has no obligation to update its opinions or the information in this publication. Unless otherwise disclosed herein, the analysts who authored this report have not received any compensation from the subject companies in the past 12 months. If this publication contains recommendations, they are general recommendations that were prepared independently of any other interests, including those of Barclays and/or its affiliates, and/or the subject companies. This publication does not contain personal investment recommendations or investment advice or take into account the individual financial circumstances or investment objectives of the clients who receive it. Barclays is not a fiduciary to any recipient of this publication. The securities and

other investments discussed herein may not be suitable for all investors and may not be available for purchase in all jurisdictions. The United States imposed sanctions on certain Chinese companies (https://home.treasury.gov/policy-issues/financial-sanctions/sanctions-programs-and-country-information/chinese-military-companies-sanctions), which may restrict U.S. persons from purchasing securities issued by those companies. Investors must independently evaluate the merits and risks of the investments discussed herein, including any sanctions restrictions that may apply, consult any independent advisors they believe necessary, and exercise independent judgment with regard to any investment decision. The value of and income from any investment may fluctuate from day to day as a result of changes in relevant economic markets (including changes in market liquidity). The information herein is not intended to predict actual results, which may differ substantially from those reflected. Past performance is not necessarily indicative of future results. The information provided does not constitute a financial benchmark and should not be used as a submission or contribution of input data for the purposes of determining a financial benchmark.

Third Party Distribution: Any views expressed in this communication are solely those of Barclays and have not been adopted or endorsed by any third party distributor.

United Kingdom: This document is being distributed (1) only by or with the approval of an authorised person (Barclays Bank PLC) or (2) to, and is directed at (a) persons in the United Kingdom having professional experience in matters relating to investments and who fall within the definition of "investment professionals" in Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"); or (b) high net worth companies, unincorporated associations and partnerships and trustees of high value trusts as described in Article 49(2) of the Order; or (c) other persons to whom it may otherwise lawfully be communicated (all such persons being "Relevant Persons"). Any investment or investment activity to which this communication relates is only available to and will only be engaged in with Relevant Persons. Any other persons who receive this communication should not rely on or act upon it. Barclays Bank PLC is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority and is a member of the London Stock Exchange.

European Economic Area ("EEA"): This material is being distributed to any "Authorised User" located in a Restricted EEA Country by Barclays Bank Ireland PLC. The Restricted EEA Countries are Austria, Bulgaria, Estonia, Finland, Hungary, Iceland, Liechtenstein, Lithuania, Luxembourg, Malta, Portugal, Romania, Slovakia and Slovenia. For any other "Authorised User" located in a country of the European Economic Area, this material is being distributed by Barclays Bank PLC. Barclays Bank Ireland PLC is a bank authorised by the Central Bank of Ireland whose registered office is at 1 Molesworth Street, Dublin 2, Ireland. Barclays Bank PLC is not registered in France with the Autorité des marchés financiers or the Autorité de contrôle prudentiel. Authorised User means each individual associated with the Client who is notified by the Client to Barclays and authorised to use the Research Services. The Restricted EEA Countries will be amended if required.

Finland: Notwithstanding Finland's status as a Restricted EEA Country, Research Services may also be provided by Barclays Bank PLC where permitted by the terms of its cross-border license.

Americas: The Investment Bank of Barclays Bank PLC undertakes U.S. securities business in the name of its wholly owned subsidiary Barclays Capital Inc., a FINRA and SIPC member. Barclays Capital Inc., a U.S. registered broker/dealer, is distributing this material in the United States and, in connection therewith accepts responsibility for its contents. Any U.S. person wishing to effect a transaction in any security discussed herein should do so only by contacting a representative of Barclays Capital Inc. in the U.S. at 745 Seventh Avenue, New York, New York 10019.

Non-U.S. persons should contact and execute transactions through a Barclays Bank PLC branch or affiliate in their home jurisdiction unless local regulations permit otherwise.

This material is distributed in Canada by Barclays Capital Canada Inc., a registered investment dealer, a Dealer Member of IIROC (www.iiroc.ca), and a Member of the Canadian Investor Protection Fund (CIPF).

This material is distributed in Mexico by Barclays Bank Mexico, S.A. and/or Barclays Capital Casa de Bolsa, S.A. de C.V. This material is distributed in the Cayman Islands and in the Bahamas by Barclays Capital Inc., which it is not licensed or registered to conduct and does not conduct business in, from or within those jurisdictions and has not filed this material with any regulatory body in those jurisdictions.

Japan: This material is being distributed to institutional investors in Japan by Barclays Securities Japan Limited. Barclays Securities Japan Limited is a joint-stock company incorporated in Japan with registered office of 6-10-1 Roppongi, Minato-ku, Tokyo 106-6131, Japan. It is a subsidiary of Barclays Bank PLC and a registered financial instruments firm regulated by the Financial Services Agency of Japan. Registered Number: Kanto Zaimukyokucho (kinsho) No. 143.

Asia Pacific (excluding Japan): Barclays Bank PLC, Hong Kong Branch is distributing this material in Hong Kong as an authorised institution regulated by the Hong Kong Monetary Authority. Registered Office: 41/F, Cheung Kong Center, 2 Queen's Road Central, Hong Kong.

All Indian securities-related research and other equity research produced by Barclays' Investment Bank are distributed in India by Barclays Securities (India) Private Limited (BSIPL). BSIPL is a company incorporated under the Companies Act, 1956 having CIN U67120MH2006PTC161063. BSIPL is registered and regulated by the Securities and Exchange Board of India (SEBI) as a Research Analyst: INH000001519; Portfolio Manager INP000002585; Stock Broker INZ000269539 (member of NSE and BSE); Depository Participant with the National Securities & Depositories Limited (NSDL): DP ID: IN-DP-NSDL-299-2008; Investment Adviser: INA000000391. BSIPL is also registered as a Mutual Fund Advisor having AMFI ARN No. 53308.The registered office of BSIPL is at 208, Ceejay House, Shivsagar Estate, Dr. A. Besant Road, Worli, Mumbai – 400 018, India. Telephone No: +91 22 67196363. Fax number: +91 22 67196399. Any other reports produced by Barclays' Investment Bank are distributed in India by Barclays Bank PLC, India Branch, an associate of BSIPL in India that is registered with Reserve Bank of India (RBI) as a Banking Company under the provisions of The Banking Regulation Act, 1949 (Regn No BOM43) and registered with SEBI as Merchant Banker (Regn No INM000002129) and also as Banker to the Issue (Regn No INB100000950). Barclays Investments and Loans (India) Limited, registered with RBI as Non Banking Financial Company (Regn No RBI CoR-07-00258), and Barclays Wealth Trustees (India) Private Limited, registered with Registrar of Companies (CIN U93000MH2008PTC188438), are associates of BSIPL in India that are not authorised to distribute any reports produced by Barclays' Investment Bank.

This material is distributed in Singapore by the Singapore Branch of Barclays Bank PLC, a bank licensed in Singapore by the Monetary Authority of Singapore. For matters in connection with this material, recipients in Singapore may contact the Singapore branch of Barclays Bank PLC, whose registered address is 10 Marina Boulevard, #23-01 Marina Bay Financial Centre Tower 2, Singapore 018983.

This material, where distributed to persons in Australia, is produced or provided by Barclays Bank PLC.

This communication is directed at persons who are a "Wholesale Client" as defined by the Australian Corporations Act 2001.

Please note that the Australian Securities and Investments Commission (ASIC) has provided certain exemptions to Barclays Bank PLC (BBPLC) under paragraph 911A(2)(I) of the Corporations Act 2001 from the requirement to hold an Australian financial services licence (AFSL) in respect of financial services provided to Australian Wholesale Clients, on the basis that BBPLC is authorised by the Prudential Regulation Authority of the United Kingdom (PRA) and regulated by the Financial Conduct Authority (FCA) of the United Kingdom and the PRA under United Kingdom laws. The United Kingdom has laws which differ from Australian laws. To the extent that this communication involves the provision of financial services by BBPLC to Australian Wholesale Clients, BBPLC relies on the relevant exemption from the requirement to hold an AFSL. Accordingly, BBPLC does not hold an AFSL.

This communication may be distributed to you by either: (i) Barclays Bank PLC directly or (ii) Barrenjoey Markets Pty Limited (ACN 636 976 059, "Barrenjoey"), the holder of Australian Financial Services Licence (AFSL) 521800, a non-affiliated third party distributor, where clearly identified to you by Barrenjoey. Barrenjoey is not an agent of Barclays Bank PLC.

This material, where distributed in New Zealand, is produced or provided by Barclays Bank PLC. Barclays Bank PLC is not registered, filed with or approved by any New Zealand regulatory authority. This material is not provided under or in accordance with the Financial Markets Conduct Act of 2013 ("FMCA"), and is not a disclosure document or "financial advice" under the FMCA. This material is distributed to you by either: (i) Barclays Bank PLC directly or (ii) Barrenjoey Markets Pty Limited ("Barrenjoey"), a non-affiliated third party distributor, where clearly identified to you by Barrenjoey. Barrenjoey is not an agent of Barclays Bank PLC. This material may only be distributed to "wholesale investors" that meet the "investment business", "investment activity", "large", or "government agency" criteria specified in Schedule 1 of the FMCA.

Middle East: Nothing herein should be considered investment advice as defined in the Israeli Regulation of Investment Advisory, Investment Marketing and Portfolio Management Law, 1995 ("Advisory Law"). This document is being made to eligible clients (as defined under the Advisory Law) only. Barclays Israeli branch previously held an investment marketing license with the Israel Securities Authority but it cancelled such license on 30/11/2014 as it solely provides its services to eligible clients pursuant to available exemptions under the Advisory Law, therefore a license with the Israel Securities Authority is not required. Accordingly, Barclays does not maintain an insurance coverage pursuant to the Advisory Law.

This material is distributed in the United Arab Emirates (including the Dubai International Financial Centre) and Qatar by Barclays Bank PLC. Barclays Bank PLC in the Dubai International Financial Centre (Registered No. 0060) is regulated by the Dubai Financial Services Authority (DFSA). Principal place of business in the Dubai International Financial Centre: The Gate Village, Building 4, Level 4, PO Box 506504, Dubai, United Arab Emirates. Barclays Bank PLC-DIFC Branch, may only undertake the financial services activities that fall within the scope of its existing DFSA licence. Related financial products or services are only available to Professional Clients, as defined by the Dubai Financial Services Authority. Barclays Bank PLC in the UAE is regulated by the Central Bank of the UAE and is licensed to conduct business activities as a branch of a commercial bank incorporated outside the UAE in Dubai (Licence No.: 13/1844/2008, Registered Office: Building No. 6, Burj Dubai Business Hub, Sheikh Zayed Road, Dubai City) and Abu Dhabi (Licence No.: 13/952/2008, Registered Office: Al Jazira Towers, Hamdan Street, PO Box 2734, Abu Dhabi). This material does not constitute or form part of any offer to issue or sell, or any solicitation of any offer to subscribe for or purchase, any securities or investment products in the UAE (including the Dubai International Financial Centre) and accordingly should not be construed as such. Furthermore, this information is being made available on the basis that the recipient acknowledges and understands that the entities and securities to which it may relate have not been approved, licensed by or registered with the UAE Central Bank, the Dubai Financial Services Authority or any other relevant licensing authority or governmental agency in the UAE. The content of this report has not been approved by or filed with the UAE Central Bank or Dubai Financial Services Authority, Barclays Bank PLC in the Qatar Financial Centre (Registered No. 00018) is authorised by the Qatar Financial Centre Regulatory Authority (QFCRA). Barclays Bank PLC-QFC Branch may only undertake the regulated activities that fall within the scope of its existing QFCRA licence. Principal place of business in Qatar: Qatar Financial Centre, Office 1002, 10th Floor, QFC Tower, Diplomatic Area, West Bay, PO Box 15891, Doha, Qatar. Related financial products or services are only available to Business Customers as defined by the Qatar Financial Centre Regulatory Authority.

Russia: This material is not intended for investors who are not Qualified Investors according to the laws of the Russian Federation as it might contain information about or description of the features of financial instruments not admitted for public offering and/or circulation in the Russian Federation and thus not eligible for non-Qualified Investors. If you are not a Qualified Investor according to the laws of the Russian Federation, please dispose of any copy of this material in your possession.

IRS Circular 230 Prepared Materials Disclaimer: Barclays does not provide tax advice and nothing contained herein should be construed to be tax advice. Please be advised that any discussion of U.S. tax matters contained herein (including any attachments) (i) is not intended or written to be used, and cannot be used, by you for the purpose of avoiding U.S. tax-related penalties; and (ii) was written to support the promotion or marketing of the transactions or other matters addressed herein. Accordingly, you should seek advice based on your particular circumstances from an independent tax advisor.

© Copyright Barclays Bank PLC (2022). All rights reserved. No part of this publication may be reproduced or redistributed in any manner without the prior written permission of Barclays. Barclays Bank PLC is registered in England No. 1026167. Registered office 1 Churchill Place, London, E14 5HP. Additional information regarding this publication will be furnished upon request.