

BUY: \$37

Target: \$50

Upside: 35%



# Freeport McMoRan (NYSE: FCX)

Materials Sector

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# Company Overview

## FCX Description

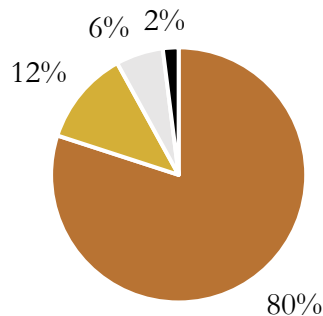
Freeport-McMoRan Inc. is an international natural resources company. The Company operates large, long-lived, geographically diverse assets with significant reserves of copper, gold, molybdenum, cobalt, oil, and gas.

Market Capitalization	\$54.686B
Forward P/E	14.71x
LTM Revenue	\$21.18B
LTM EBITDA	\$9.58B

## Revenue Breakdown

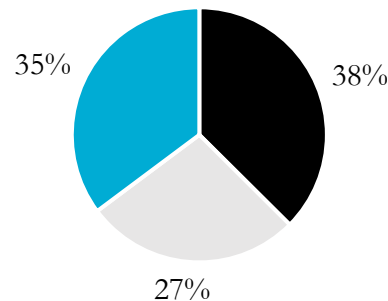
Segment

■ Copper ■ Gold  
■ Molybdenum ■ Other



Geography

■ North America ■ South America  
■ Indonesia



## Operating Mines

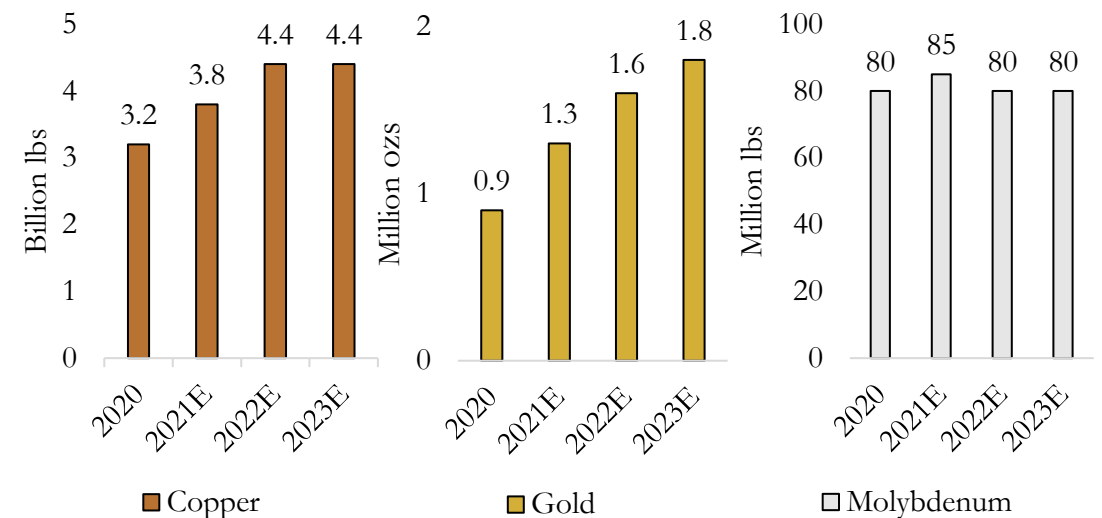
### North America

- Ownership in seven different mines in the US
- Owns 72% of the largest copper mine (Morenci) in North America
- Owns 100% of the third through sixth largest mines in this region

### International

- Has shared interest in two mines in South America
- Owns 60% of the Grasberg mine in Indonesia (largest gold reserve and second largest copper reserve globally)

## FCX Projected Mining Growth



# Industry Analysis

## Industry Drivers

### Electric Vehicles

- >65% of global copper is used in applications that deliver electricity
- EVs use up to 4x more copper than internal combustion engines

### Supply Scarcity

- Historically low inventories (LME hit 47-year low and Shanghai lowest since 2009)
- Slow project approval rate

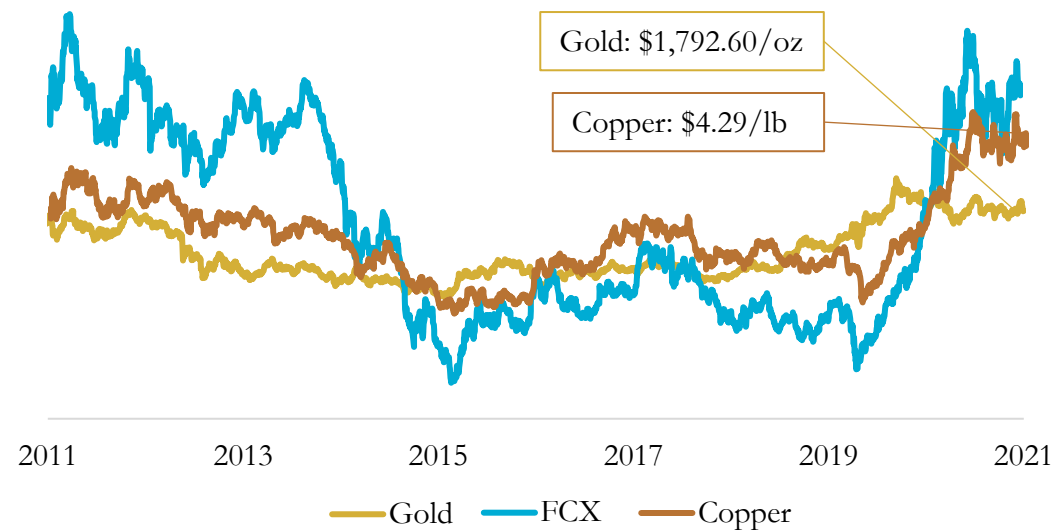
### Renewable Energy

- Clean energy technologies use 4-5x more copper than fossil fuel power generation

### Infrastructure Bill

- Global economy recovery and infrastructure development will fuel demand

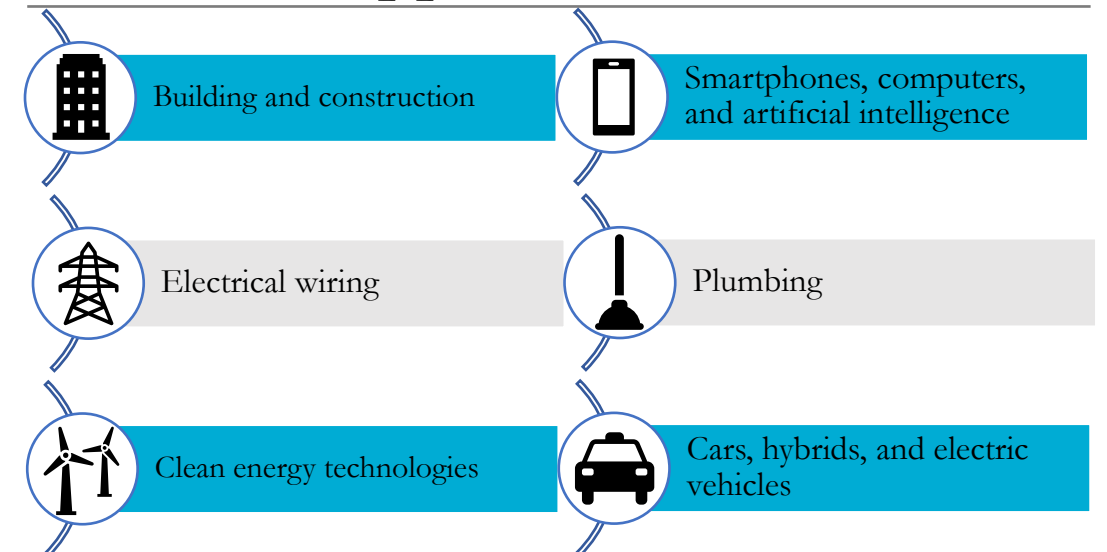
## FCX vs Commodities Prices



## Competitors



## Uses of Copper



# Copper Shortage Benefiting Miners

## Increased Demand for Copper

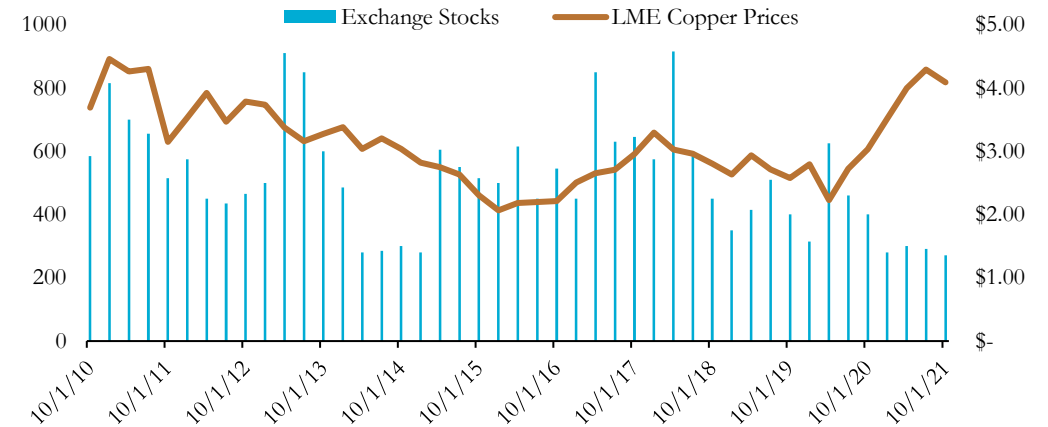
Global green-energy push has led to significant increases in the usage of copper

Worldwide rising costs of energy and emergence of Beijing Green Goals led to stockpiling

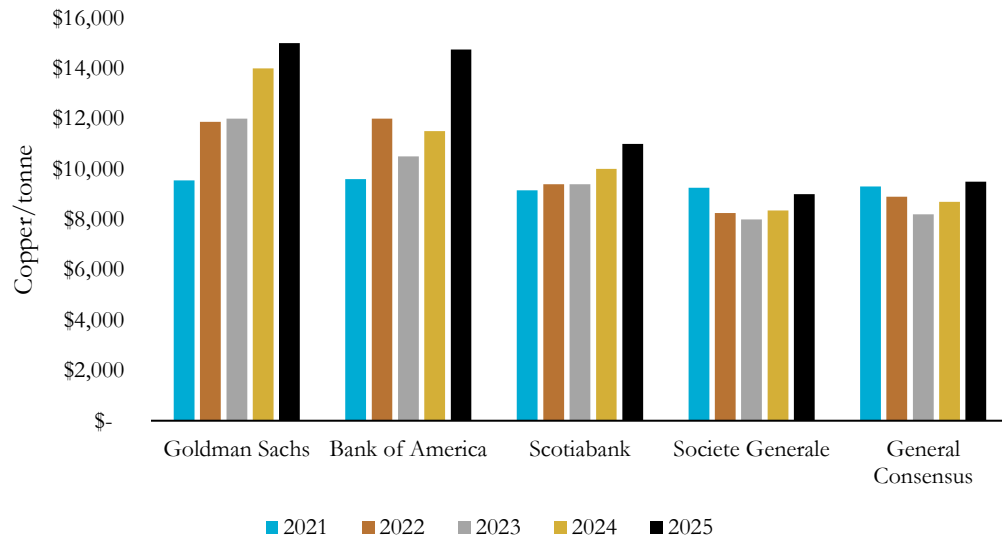


Supply shortage combined with historic increase in demand has led to higher copper prices

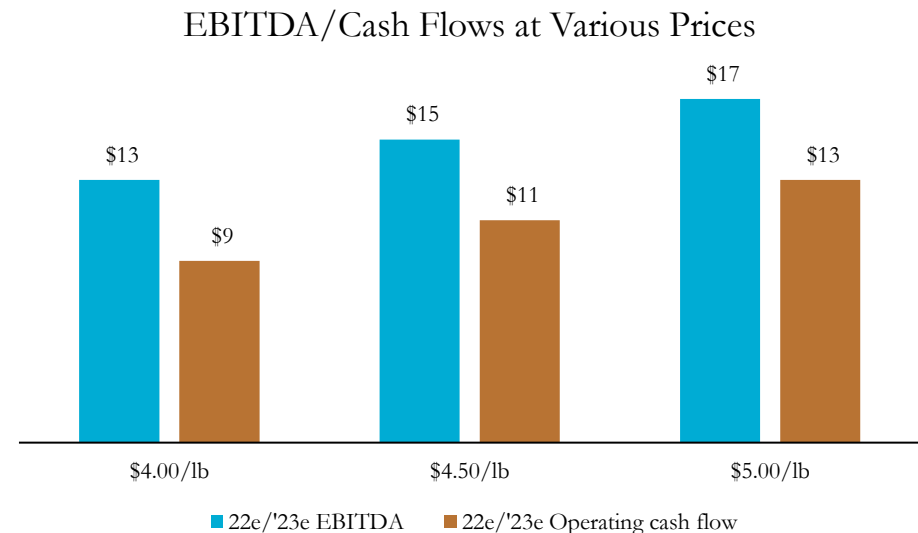
## Copper Prices vs Ending Supply



## Street Projections

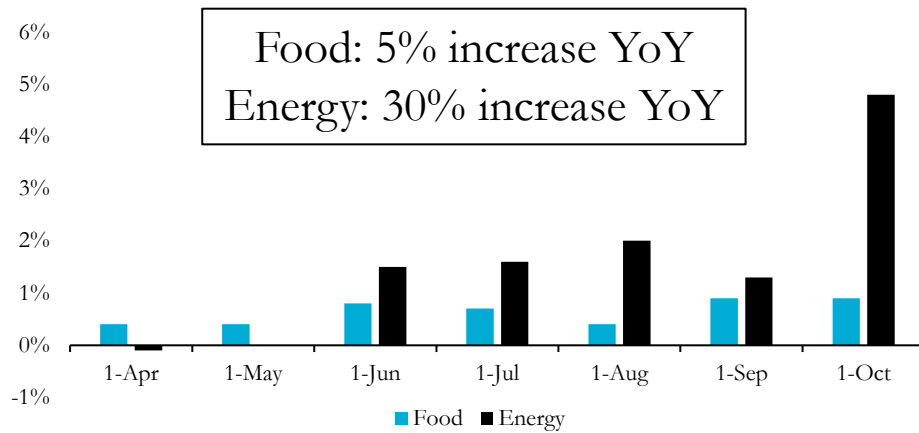


## Price Projections' Effects



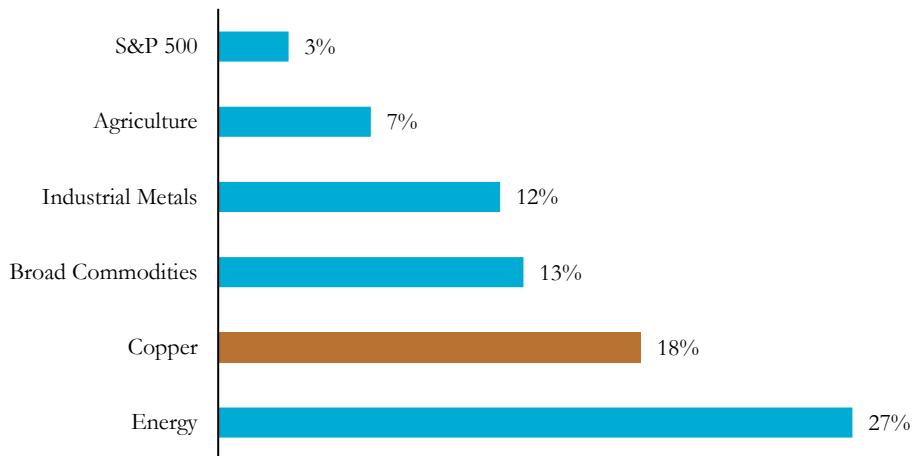
# Inflation Hedge

## Rising Inflation Rates

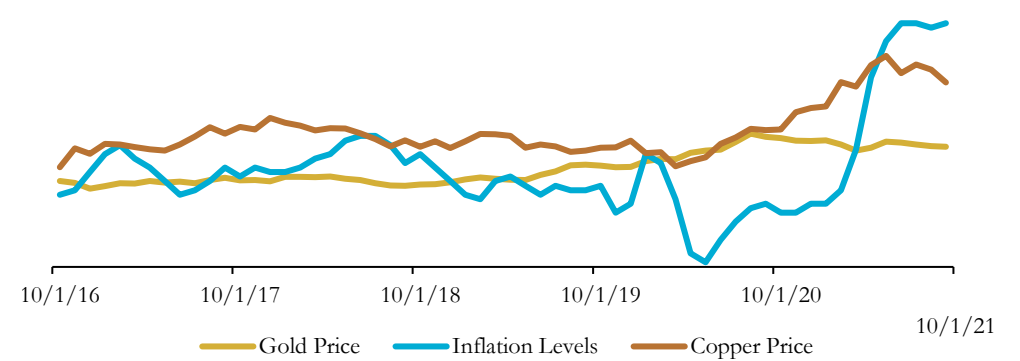


## Copper as an Inflation Hedge

Gains for every 1% annual rise in U.S. CPI

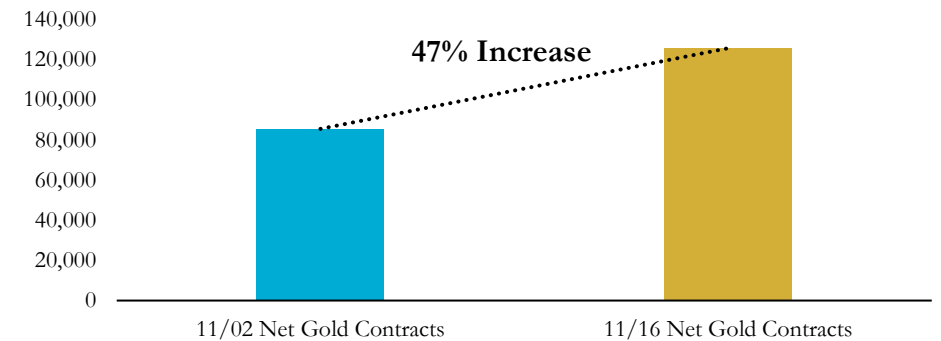


## Gold vs. Copper vs. Inflation



## Recent Gold Bullish Activity

Comex Gold Futures Contracts

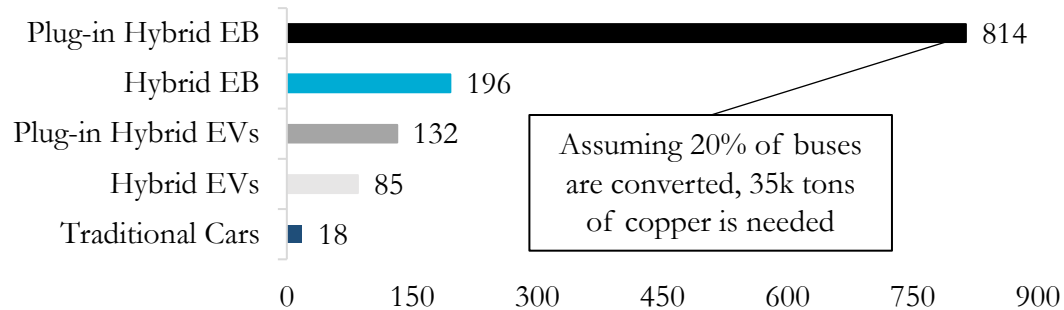


Société Générale reports this as gold's 3rd largest bullish inflow on record

## Electric Vehicles

- Pledges \$7.5 billion for zero- and low-emission buses and ferries
  - The US yellow school bus fleet is made up of approximately 480,000 vehicles
  - The US also have a federal agency fleet composed of almost 650,000 vehicles
- These investments will be in addition to existing EV demand that will rise further due to tax incentives of up to \$12,500 per vehicle to spur consumer demand

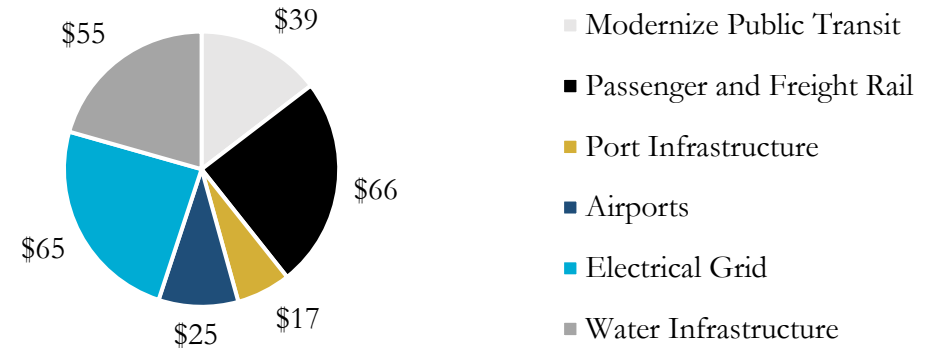
Copper Usage Per Vehicle (lbs.)



- Another \$7.5 billion will go towards a nationwide network of plug-in electric vehicle chargers
  - Aims to jump start Biden's goal of constructing 500,000 EV chargers by 2030

## Transportation, Power, and Water

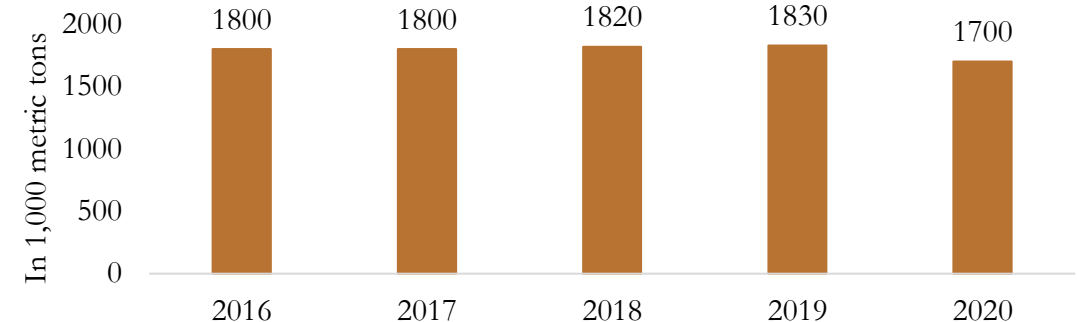
Copper-Related Bill Allocation (\$ in billions)



## Affect on Copper

- Assuming an annual US refined copper consumption of approximately 1.8 million tons per year, the bill will translate into additional demand of 500,000 tons over the next five years

US Copper Consumption

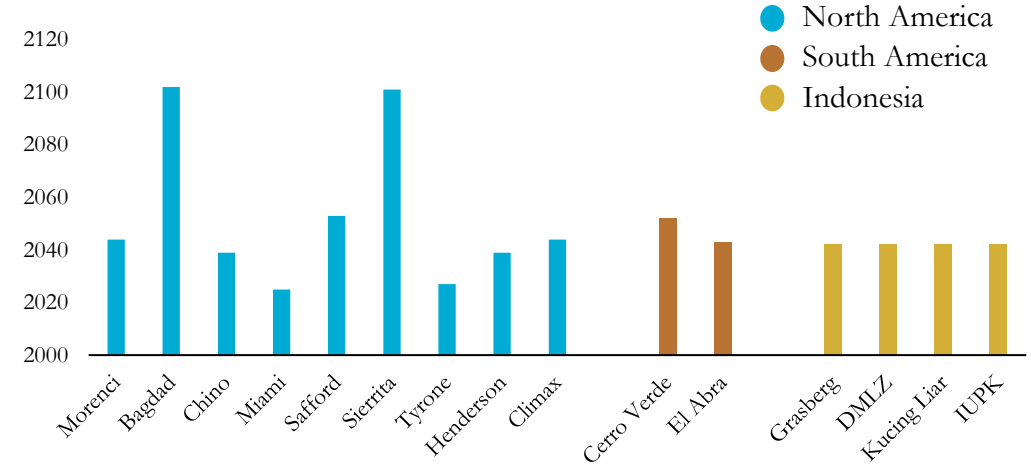


# FCX Advantages

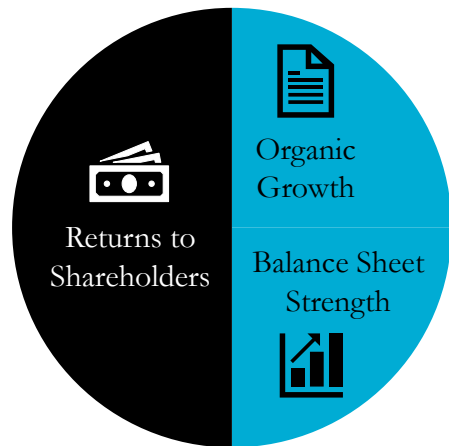
## Strong Financial Performance



## Vast Array of Long-Lived Reserves



## Performance Based Payout



Up to 50% FCF returns dedicated towards shareholder returns

Increased dividend by 100% for 2022 due to strong 2021 results

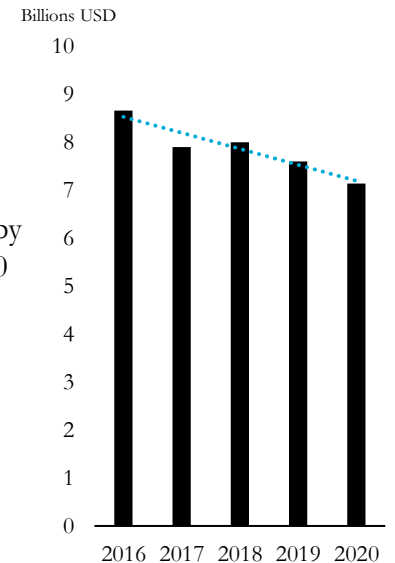
## Environmental Focus

Copper Mark status for 6 mines with 6 more under commitment

Americas Copper 15% intensity-reduction plan by 2030 established in 2020

Reduced GHG emissions by 21% since 2016

Commitment to be net-zero by 2050

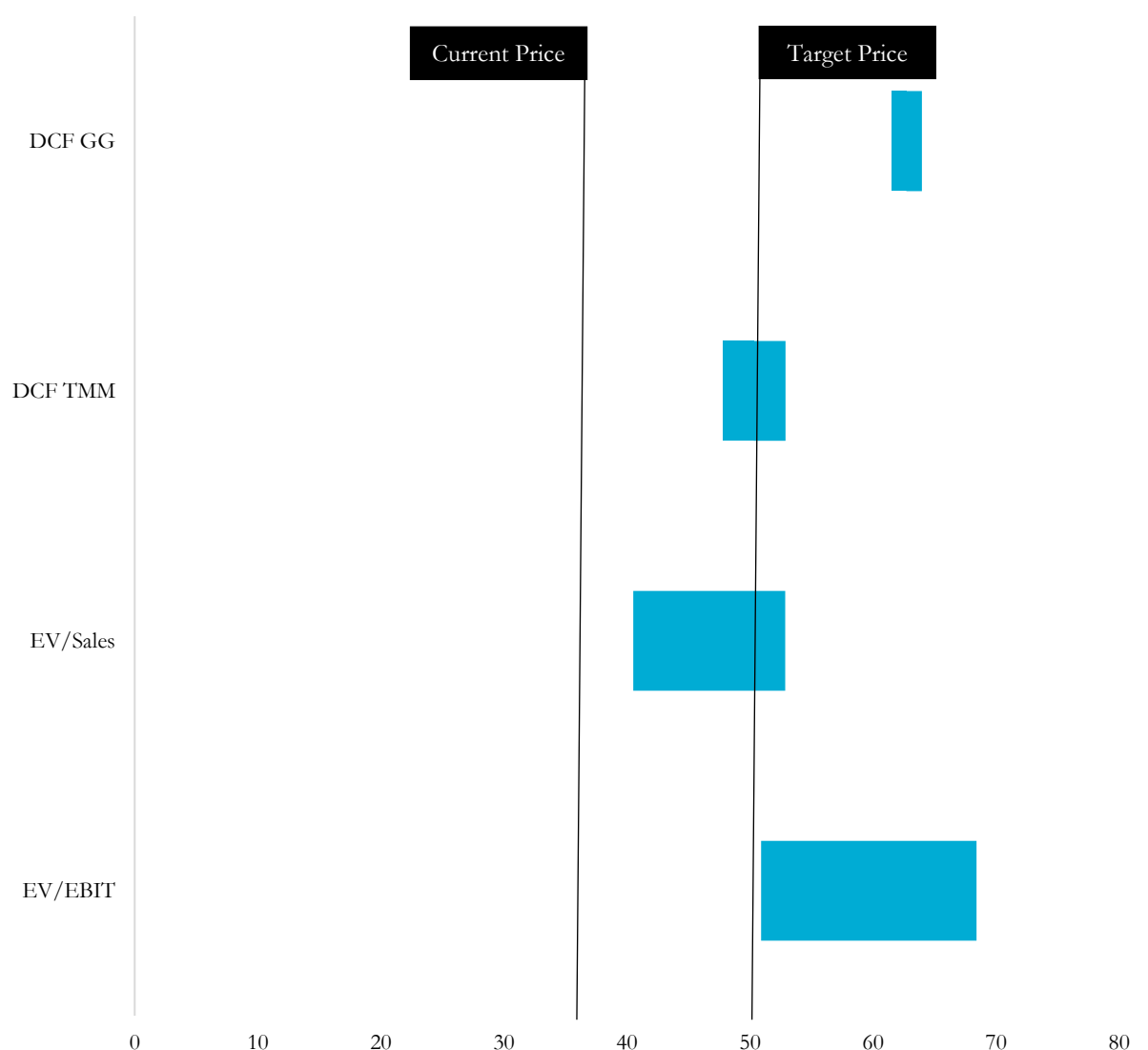


# Valuation

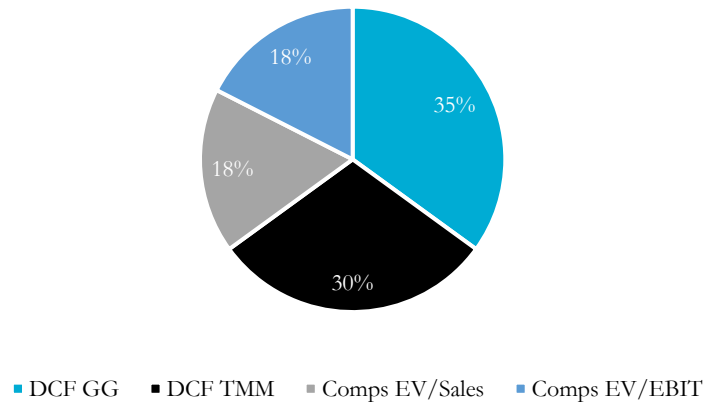
## DCF Sensitivity Analysis

		WACC				
		12.23%	12.73%	13.23%	13.73%	14.23%
Growth Rate	1.00%	63.88	61.47	59.24	57.18	55.26
	1.25%	65.19	62.68	60.36	58.21	56.22
	1.50%	66.56	63.93	<b>61.52</b>	59.28	57.21
	1.75%	68.00	65.25	62.73	60.40	58.25
	2.00%	69.51	66.63	63.99	61.56	59.32
		WACC				
		12.23%	12.73%	13.23%	13.73%	14.23%
EV/EBITDA	6.0	43.02	42.81	42.61	42.41	42.22
	6.5	45.59	45.38	45.18	44.98	44.79
	7.0	48.16	47.96	<b>47.76</b>	47.56	47.37
	7.5	50.74	50.53	50.33	50.13	49.94
	8.0	53.31	53.11	52.91	52.71	52.51

## Football Field



## Valuation Weighting





# Risks and Mitigants

## Risks

Supply shortages are resolved sooner than expected

The infrastructure bill's implementation is delayed

Further supply restrictions due to mining concerns or political unrest

## Mitigants

Pent up demand for metals will still need to be met

The timeline for copper demand will be lengthened

FCX has a strong diversified asset portfolio and performance history

# Thank you

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Questions?



BUY: \$37

Target: \$50

Upside: 35%

# Appendix

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- A) Income Statement
- B) Balance Sheet
- C) Cash Flows
- D) Revenue Drive & Assumptions
- E) WACC
- F) DCF
- G) Comparable Companies Analysis

# A) Income Statement

Freeport McMoRan Income Statement								
Millions USD	FY 2019	FY 2020	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E
Revenues	\$ 14,402	\$ 14,198	\$ 22,563	\$ 24,208	\$ 25,951	\$ 27,285	\$ 28,247	\$ 28,860
<b>Cost of sales:</b>								
Production and delivery	11,534	10,031	11,772	16,946	18,166	19,100	19,773	20,202
% of sales	80.1%	70.7%	52.2%	70.0%	70.0%	70.0%	70.0%	70.0%
Depreciation, depletion and amortization	1,412	1,528	1,901	775	714	716	706	707
Metals inventory adjustments			15	0	0	0	0	0
% of sales	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Total cost of sales	12,946	11,559	13,687	17,721	18,879	19,816	20,479	20,909
Selling, general and administrative expenses	394	370	407	629	675	709	734	750
% of sales	2.7%	2.6%	1.8%	2.6%	2.6%	2.6%	2.6%	2.6%
Mining exploration and research expenses	104	50	51	121	130	136	141	144
% of sales	0.7%	0.4%	0.2%	0.5%	0.5%	0.5%	0.5%	0.5%
Environmental obligations and shutdown costs	105	159	80	242	260	273	282	289
% of sales	0.7%	1.1%	0.4%	1.0%	1.0%	1.0%	1.0%	1.0%
Net loss (gain) on sales of assets	(417)	(473)	(69)	(24)	(26)	(27)	(28)	(29)
% of sales	-2.9%	-3.3%	-0.3%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
Total costs and expenses	13,132	11,665	14,156	18,690	19,917	20,907	21,609	22,063
Operating (loss) income	1,270	2,533	8,407	5,519	6,034	6,378	6,638	6,796
Interest expense, net	(620)	(598)	(563)	(774)	(853)	(228)	(236)	(241)
% of long-term debt	-6.3%	-6.2%	-6.4%	-5.7%	-5.9%	-1.5%	-1.5%	-1.5%
Net loss on early extinguishment of debt	(27)	(101)						
Other income, net	(138)	59	68	48	52	55	56	58
% of sales	-1.0%	0.4%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%
(Loss) income from continuing operations before income taxes and	485	1,893	7,912	4,793	5,232	6,204	6,459	6,614
Benefit from (provision for) income taxes	(510)	(944)	(2,264)	(1,270)	(1,386)	(1,644)	(1,712)	(1,753)
Tax rate	-105.2%	-49.9%	-28.6%	-26.5%	-26.5%	-26.5%	-26.5%	-26.5%
Equity in affiliated companies' net earnings (losses)	12	12						
Net (loss) income from continuing operations	(13)	961	5,648	3,523	3,846	4,560	4,747	4,861
Net gain from discontinued operations	3	0						
Net income	(10)	961	5,648	3,523	3,846	4,560	4,747	4,861

# B) Balance Sheet

Freeport McMoRan Balance Sheet								
Millions USD	FY 2019	FY 2020	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E
<b>Current assets:</b>								
Cash and cash equivalents	\$ 2,020	\$ 3,657						
Trade accounts receivable	741	892	806	1,707	1,807	1,495	1,548	1,581
AR Days	19	23	13	26	25	20	20	20
Income and other tax receivables	426	520	516	768	813	822	851	870
AR Days	11	13	8	12	11	11	11	11
<b>Inventories:</b>								
Total materials and supplies, net	1,649	1,594	1,647	2,617	2,770	3,111	3,220	3,290
% sales	11.4%	11.2%	7.3%	10.8%	10.7%	11%	11%	11%
Mill and leach stockpiles	1,143	1,014	1,176	1,931	2,044	2,183	2,260	2,309
% sales	7.9%	7.1%	5.2%	8.0%	7.9%	8%	8%	8%
Product	1,281	1,285	1,471	2,181	2,308	2,565	2,655	2,713
% sales	8.9%	9.1%	6.5%	9.0%	8.9%	9%	9%	9%
Other current assets	655	341	529	997	1,055	955	989	1,010
% sales	4.5%	2.4%	2.3%	4.1%	4.1%	4%	4%	4%
Total current assets	7,915	9,303						
Property, plant, equipment and mine development costs, net	29,584	29,818						
Long-term mill and leach stockpiles	1,425	1,463						
Other assets	1,885	1,560						
Total assets	40,809	42,144						
<b>Current liabilities:</b>								
Accounts payable and accrued liabilities	2,576	2,708	2,639	3,523	3,746	4,343	4,489	4,583
AP Days	73	86	70	73	72	80	80	80
Current portion of environmental and asset retirement obligations	119	324						
Long-term Debt, Current Maturities	436	351	926	371	394	651	673	687
AP Days	12	11	25	8	8	12	12	12
Accrued income taxes	5	34	236	102	70	33	34	35
% of income taxes	-1.0%	-3.6%	-10.4%	-8.0%	-5.1%	-2%	-2%	-2%
Dividends Payable, Current	73	0						
Total current liabilities	3,209	3,417						
Long-term debt, less current portion	9,821	9,677	8,798	13,598	14,457	15,201	15,710	16,040
AP Days	277	306	235	280	280	280	280	280
Deferred Income Tax Liabilities, Net	4,210	4,408						
Environmental and asset retirement obligations, less current portion	3,630	3,705						
Other liabilities	2,491	2,269						
Total liabilities	23,361	23,476						
<b>Stockholders' equity:</b>								
Common stock	158	159						
Capital in excess of par value	25,830	26,037						
Accumulated deficit	(12,280)	(11,681)						
Accumulated other comprehensive loss	(676)	(583)						
Common stock held in treasury	(3,734)	(3,758)						
Total stockholders' equity	9,298	10,174						
Noncontrolling interests	8,150	8,494						
Total equity	17,448	18,668						
Total liabilities and equity	\$ 40,809	\$ 42,144						

# C) Cash Flows

Freeport McMoRan Cash Flow Statement		
Millions USD	FY 2019	FY 2020
Metals inventory adjustments	\$ 165	\$ 156
<b>Cash flow from operating activities:</b>		
Net (loss) income	(189)	865
<b>Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities:</b>		
Depreciation, depletion and amortization	1,412	1,528
% of CapEx	-53.2%	-77.9%
Metals inventory adjustments		
Payments for Legal Settlements	(187)	(139)
Gain (Loss) on Disposition of Assets	(417)	(473)
Stock-based compensation	63	99
Net charges for environmental and asset retirement obligations, including accretion	221	181
Payments for environmental and asset retirement obligations	244	216
Net charges for defined pension and postretirement plans	108	65
Pension plan contributions	(75)	(121)
Net loss on early extinguishment of debt	27	101
Deferred income taxes	29	181
Proceeds from Dividends Received	40	
Payments for Environmental Liabilities	(37)	(33)
Cerro Verde royalty dispute, charges	65	32
Other, net	138	53
<b>Changes in working capital and other:</b>		
Accounts receivable	119	132
Inventories	259	42
Other current assets	60	(27)
Accounts payable and accrued liabilities	(60)	115
Accrued income taxes and timing of other tax payments	(29)	403
Net cash provided by operating activities	1,482	3,017
<b>Cash flow from investing activities:</b>		
Capital expenditures	(2,652)	(1,961)
% of sales	-18.4%	-13.8%
Proceeds from Sale of Other Assets, Investing Activities	0	0
Proceeds from Sale of Productive Assets		0
Acquisition of minority interest in PT Smelting		0
Other, net	(12)	(7)
Net cash used in investing activities	(2,103)	(1,264)

<b>Cash flow from financing activities:</b>		
Proceeds from debt	1,879	3,531
Repayments of debt	(3,197)	(3,724)
<b>Cash dividends and distributions paid:</b>		
Common stock	(291)	(73)
Noncontrolling interests	(82)	0
Other, net	(30)	(18)
Contributions from noncontrolling interests		
Stock-based awards net payments		
Proceeds from exercised stock options		
Payments of Financing Costs		
Net cash provided by (used in) financing activities	(1,556)	(128)
Cash, Cash Equivalents, Restricted Cash and Restricted Cash Equivalents, Period Increase (Decrease), Including Exchange Rate Effect	(2,177)	1,625
Cash, cash equivalents, restricted cash and restricted cash equivalents at beginning of year		
Cash, cash equivalents, restricted cash and restricted cash equivalents at end of period	2,278	3,903
Inventory Adjustments	179	96
North America Copper Mines Segment [Member]		
<b>Cash flow from investing activities:</b>		
Proceeds from Sale of Other Assets, Investing Activities	109	154
North America Copper Mines Segment [Member]		
<b>Cash flow from investing activities:</b>		
Capital expenditures	(877)	(428)
South America Mines Segment [Member]		
<b>Cash flow from investing activities:</b>		
Capital expenditures	(256)	(183)
Grasberg Segment [Member]		
<b>Cash flow from investing activities:</b>		
Capital expenditures	(1,369)	(1,266)
Molybdenum		
<b>Cash flow from investing activities:</b>		
Capital expenditures	(19)	(19)
Other Segments [Member]		
<b>Cash flow from investing activities:</b>		
Capital expenditures	(131)	(65)

# D) Revenue Drive & Assumptions

D&A	1,412	1,528	1,901	775	714	716	706	707
% of capex	-161.00%	-357.01%	-578.31%	-145.58%	-110.00%	-105%	-100%	-98%
CapEx	(877)	\$(428)	(329)	(533)	(649)	(682)	(706)	(721)
% of sales	-6.09%	-3.01%	-1.46%	-2.20%	-2.50%	-2.50%	-2.50%	-2.50%

Current Assets	5,895	5,646	6,145	10,201	10,796	11,131	11,523	11,773
Current Liabilities	3,017	3,093	3,801	3,996	4,210	5,028	5,196	5,305
NWC	2,878	2,553	2,343	6,205	6,586	6,103	6,327	6,468
Change in NWC			(210)	3,862	380	(483)	224	141

Freeport McMoRan Revenue Drive								
Millions USD	FY 2019	FY 2020	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E
Revenue	14,402	14,198	22,563	24,208	25,951	27,285	28,247	28,860
<b>Copper</b>								
Concentrate	4,566	4,294	8,822	10,291	10,797	11,120	11,343	11,570
% growth		-6.0%	105.4%	16.7%	4.9%	3.0%	2.0%	2.0%
Cathode	3,656	4,204	5,607	5,898	6,386	6,769	7,074	7,215
% growth		15.0%	33.4%	5.2%	8.3%	6.0%	4.5%	2.0%
Rod and other refined copper products	2,110	2,052	3,603	4,335	4,686	4,920	5,092	5,194
% growth		-2.7%	75.6%	20.3%	8.1%	5.0%	3.5%	2.0%
Purchased copper	1,060	821	699	56	33	31	30	28
% growth		-22.5%	-14.8%	-92.1%	-40.6%	-5.0%	-5.0%	-5.0%
<b>Gold</b>	1,620	1,702	2,545	3,083	3,490	3,839	4,069	4,191
% growth		5.1%	49.5%	21.1%	13.2%	10.0%	6.0%	3.0%
<b>Molybdenum</b>	1,169	848	1,313	1,247	1,223	1,260	1,285	1,298
% growth		-27.5%	54.9%	-5.0%	-1.9%	3.0%	2.0%	1.0%
<b>Other</b>	905	592	883	891	927	936	946	955
% growth		-34.6%	49.2%	1.0%	1.0%	1.0%	1.0%	1.0%
<b>Revenue adjustments:</b>								
Treatment charges	(404)	(362)	(447)	(467)	(427)	(418)	(409)	(400)
% of sales	-2.8%	-2.5%	-2.0%	-1.9%	-1.6%	-2.2%	-2.2%	-2.2%
Royalty expense	(113)	(165)	(337)	(390)	(402)	(405)	(409)	(412)
% of sales	-0.8%	-1.2%	-1.5%	-1.6%	-1.5%	0.8%	0.8%	0.8%
Export duties	(221)	(92)	(216)	(289)	(296)	(298)	(299)	(301)
% of sales	-1.5%	-0.6%	-1.0%	-1.2%	-1.1%	0.6%	0.6%	0.6%
Revenues from contracts with customers	14,348	13,894	22,471	24,655	26,416	27,755	28,722	29,339
Embedded derivatives	54	304	92	(447)	(465)	(470)	(474)	(479)
% of sales	0.4%	2.1%	0.4%	-1.8%	-1.8%	1.0%	1.0%	1.0%
<b>Total revenue</b>	<b>14,402</b>	<b>14,198</b>	<b>22,563</b>	<b>24,208</b>	<b>25,951</b>	<b>27,285</b>	<b>28,247</b>	<b>28,860</b>

# E) WACC

FCX WACC	
MV Debt	9,665
Weight of Debt	14.85%
Pre-tax cost of debt	2.82%
Post-tax cost of debt	2.07%
MV Equity	55435
Weight of equity	85.15%
Expected market return	10%
risk free rate	1.60%
Equity risk premium	8.40%
beta	1.62
cost of equity	15.17%
WACC	13.23%

Interest Coverage Ratio	
EBIT	2,491
Interest Expense	(598)
Coverage ratio	-4.17
Spread	1.22%
Risk Free	1.60%
Cost of Debt	2.82%



# F) DCF

FCX DCF								
Millions USD	FY 2019	FY 2020	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E
EBIT	1,105	2,491	8,475	5,567	6,085	6,433	6,695	6,854
Tax	(510)	(944)	(2,264)	(1,270)	(1,386)	(1,644)	(1,712)	(1,753)
NOPAT	1,615	3,435	10,739	6,838	7,472	8,077	8,406	8,607
Plus: D&A	1,412	1,528	1,901	775	714	716	706	707
Less: CapEx	(877)	(428)	(329)	(533)	(649)	(682)	(706)	(721)
Less: Change In NWC	0	0	(210)	3,862	380	(483)	224	141
FCFF	2,150	4,535	12,520	3,218	7,156	8,594	8,182	8,452
Gordon Growth				0.5	1.5	2.5	3.5	4.5
FCFF		4,535	12,520	3,218	7,156	8,594	8,182	8,452
PV of FCFF				3,025	5,940	6,300	5,297	4,833
PV of Terminal Value								73,159
Terminal Multiple				0.5	1.5	2.5	3.5	4.5
FCFF		4,535	12,520	3,218	7,156	8,594	8,182	8,452
PV of FCFF				3,025	5,940	6,300	5,297	4,833
PV of Terminal Value								52,928

WACC	13%
Terminal Multiple	7
Growth Rate	2%

Gordon Growth	
Enterprise value	105,710
Cash	7,672
Debt	9,665
Non-Controlling Interests	13,353
Equity value	90,364
DSO	1,468
Share Price	61.54
Terminal Multiple	
Enterprise value	85,479
Cash	7,672
Debt	9,665
Non-Controlling Interests	13,353
Equity value	70,133
DSO	1,468
Share Price	47.76

# G) Comparable Companies Analysis

Name	Ticker	2Y Corr	Mkt Cap (USD)	BF EV/EBITDA	BF P/E	BF EV/EBIT	BF EV/Rev	LF P/BV
Freeport-McMoRan Inc	FCX US		54685953736	5.54	11.17	6.84	2.68	4.09
First Quantum Minerals Ltd	FM CN	0.81	14548711046	4.94	9.49	6.94	2.77	1.50
Lundin Mining Corp	LUN CN	0.75	5753124632	3.64	8.26	5.11	1.89	1.35
Boliden AB	BOL SS	0.62	9076518603	4.99	9.78	7.51	1.22	1.71
Capstone Mining Corp	CS CN	0.60	1912262043	3.97	8.53	4.54	2.18	1.97
Aurubis AG	NDA GR	0.58	3767726328	6.21	12.83	9.46	0.21	1.02
Encore Wire Corp	WIRE US	0.55	2811129900	7.99	12.72	8.65	1.06	2.32
Turquoise Hill Resources Ltd	TRQ CN	0.48	2864047896	8.21	12.87	12.09	3.53	0.29
Equinox Gold Corp	EQX CN	0.37	2172067838	4.04	10.31	6.22	1.68	0.93
Min			1912262043	3.64	8.26	4.54	0.21	0.29
Q1			2491598869	4.01	9.01	5.66	1.14	0.97
Med			3767726328	4.99	10.31	6.94	1.89	1.50
Q3			11812614825	7.10	12.77	9.06	2.73	2.15
Max			54685953736	8.21	12.87	12.09	3.53	4.09

Comps Output	EV	Debt	Cash	equity	Shares	Per share
EV/EBIT	8,475					
Min	4.54	38440	9,665	7672	36,447	1468.47
Q1	5.66	48011	9,665	7672	46,018	1468.47
Med	6.94	58856	9,665	7672	56,863	1468.47
Q3	9.06	76754	9,665	7672	74,761	1468.47
Max	12.09	102468	9,665	7672	100,475	1468.47

EV/SALES	22563.16					
Min	0.21	4650	9,665	7,672	2,657	1468.47
Q1	1.14	25695	9,665	7,672	23,702	1468.47
Med	1.89	42570	9,665	7,672	40,577	1468.47
Q3	2.73	61505	9,665	7,672	59,512	1468.47
Max	3.53	79643	9,665	7,672	77,650	1468.47