RESEARCH REPORT

October 18, 2021

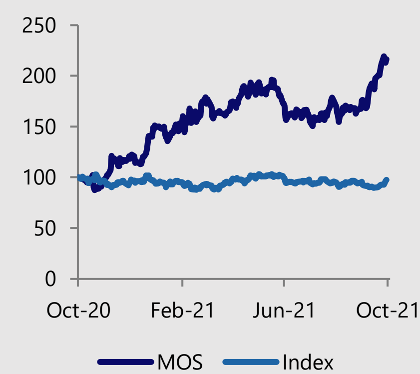
Stock Rating	HOLD
Price Target	USD $38.80
Current Price	USD $41.47

Price Target

$38.80

Ticker	MOS
Market Cap (MM)	$15.93B
P/E ratio	11.43x
Dividend Yield	0.72%

52 Week Performance



Industrials

Shivam Aggarwal
saggarwal@quiconline.com

Martina Zou
mzou@quiconline.com

Luke D'Ambrosi
ldambrosi@quiconline.com

Lola Jiao
ljiao@quiconline.com

Melody Liu
mliu@quiconline.com

The Mosaic Company

Making the MOS-t of Market Tailwinds

The Mosaic Company (NYSE: MOS) offers an attractive opportunity to gain greater exposure to the agricultural sector through its industry-leading position in the phosphates and potash businesses. Recently, crop prices and the agriculture industry has done particularly well, driven by strong demand, both in the short-term and the long-term. Mosaic offers an attractive opportunity to diversify the QUIC M&M portfolio, especially as it is currently very heavily weighted towards precious metals, particularly gold.

Mosaic offers an attractive investment profile, including being well-positioned in a growing industry, being a leading player in an attractive Brazilian market, and strong capital allocation.

When valuing Mosaic's investment profile, various valuation methods were used. These measured Mosaic's relative value as well as its intrinsic value. Although the QUIC M&M team has conviction in Mosaic in the short-term, the team believes it is currently fairly valued. As well, the team sees macroeconomic uncertainty in the long-term, especially as potash prices see inevitable declines from current record-high prices. Thus, the QUIC Metals & Mining team will continue to monitor the company and industry in the future, but will not be entering the name or any peers in the industry.

The information in this document is for EDUCATIONAL and NON-COMMERCIAL use only and is not intended to constitute specific legal, accounting, financial or tax advice for any individual. In no event will QUIC, its members or directors, or Queen's University be liable to you or anyone else for any loss or damages whatsoever (including direct, indirect, special, incidental, consequential, exemplary or punitive damages) resulting from the use of this document, or reliance on the information or content found within this document. The information may not be reproduced or republished in any part without the prior written consent of QUIC and Queen's University.

QUIC is not in the business of advising or holding themselves out as being in the business of advising. Many factors may affect the applicability of any statement or comment that appear in our documents to an individual's particular circumstances.

© Queen's University 2019

Table of Contents

Company Overview

The Mosaic Company (NYSE: MOS) mines and distributes phosphate and potash crop nutrients, serving farmers across the globe. Mosaic accounts for 13% and 11% of global annual phosphate and potash production, respectively. Specifically in North America, Mosaic accounts for 73% and 40% of phosphate and potash annual production, respectively.

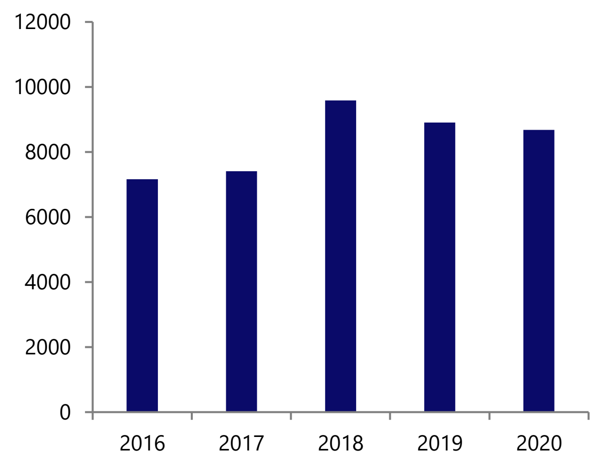
Based in Tampa Bay, Florida, Mosaic was founded in 2004 through the incorporation between IMC Global Inc. and Cargill's Crop Nutrition business. In 2014, Mosaic acquired the fertilizer units of Archer Daniels Midland in Brazil and Paraguay. Then in 2018, Mosaic acquired Vale Fertilizantes S.A, now known as Mosaic Fertilizantes P&K S.A, making Mosaic the largest fertilizer producer and supplier in Brazil. Mosaic now accounts for 100% of potash production and 70% of phosphate crop nutrients in Brazil.

Mosaic operates across North and South America with over 13,000 thousand employees, owning a total of 9 mining facilities and 8 production facilities. Their business is organized into segments of Phosphates, Potash, and Mosaic Fertilizantes. The phosphates segment markets phosphate-based crop nutrients and animal feed ingredients mined and produced in Florida and Louisiana. Potash has mining and production facilities in Canada and the U.S for its potash-based crop nutrients, animal feed ingredients, and industrial products. Then, Mosaic Fertilizantes consists of their distribution centers in Brazil and Paraguay and the assets from their acquisition gaining phosphate chemical plants, and phosphate and potash mines.

Mosaic optimizes their products through advanced plant genetics, crop protection, and equipment technologies. With expanding world population (expected to increase by ~70% by 2050), the company aims to meet the growing agricultural production demand by improving their fertilizer performance products for optimal crop growth.

EXHIBIT I

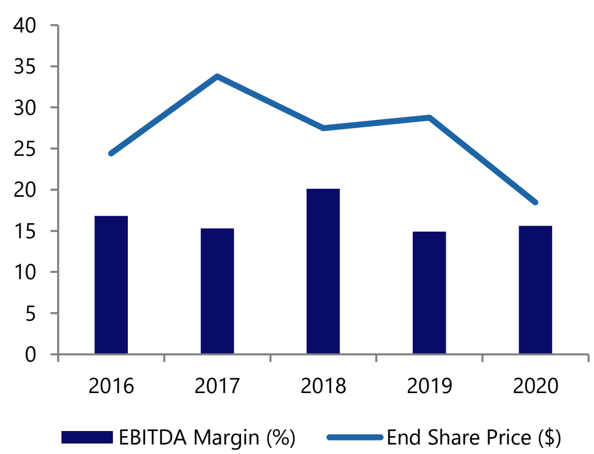
Revenue Growth ($M USD)



Source(s): S&P Capital IQ

EXHIBIT II

Key Financial Findings



Source(s): S&P Capital IQ

Company Overview

In 2020, Mosaic had a total revenue of $8681.7M from its diversified products sold. Straight from their own mines, Mosaic produces phosphate crop nutrients, potash crop nutrients, crop nutrient blends under the brand names of MircoEssentials, K-Mag, and Aspire, and performance products including industrial potash, feed products, and nitrogen.

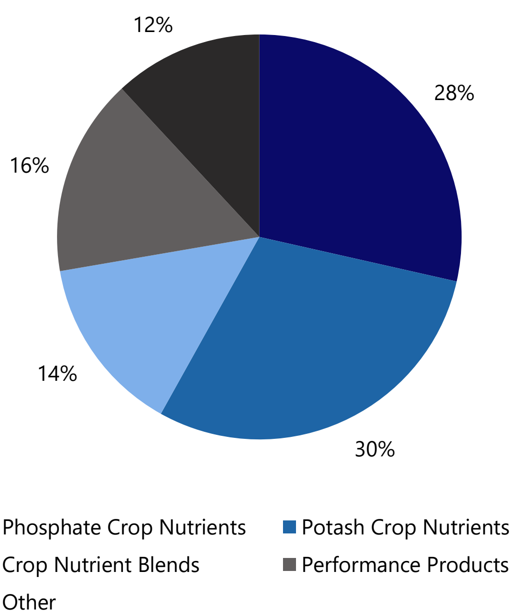
The company produces millions of tonnes of these products and distributes them globally to retail customers, regional distributors, and large international growers. Mosaic has a wide reach geographically as they sell to over 40 countries, measured based on the customer's location (sales from Mosaic to Canpotex is recognized upon delivery to the unrelated third-party customer).

Joc O'Rouke serves as the President and Chief Executive Officer of the Mosaic Company. He is the 3rd executive to lead Mosaic and was appointed to his current position in 2015. Has been a part of Mosaic since 2009, while first joining Mosaic as the Executive Vice President of Operations. Clint Freeland is the Chief Financial Officer and was named in 2018. Currently, alongside them are 7 other Senior Vice Presidents, all with extensive leadership experience.

Mosaic's management is compensated through a base salary, annual short-term incentives, long-term incentive compensation, and equity awards. The Compensation Committee reviews the type and amount of direct compensation management receives and follows a "pay-for-performance" policy. They ensure direct compensation is at-risk and tied to the operational, financial, and stock price performance.

EXHIBIT III

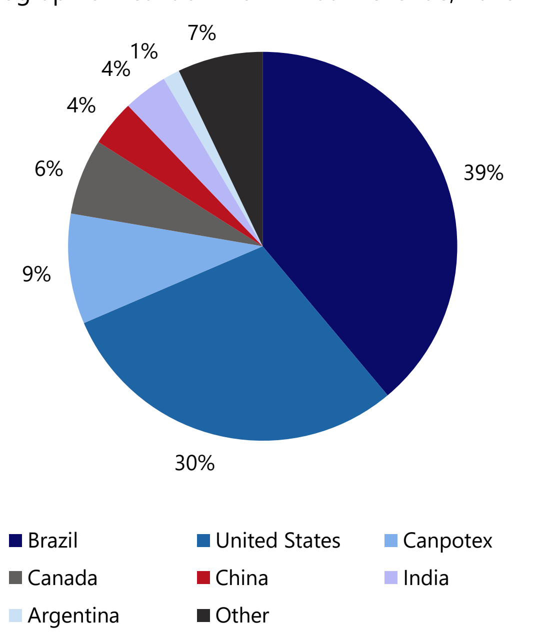
Product Breakdown of Annual Revenue, 2020



Source(s): Company Filings

EXHIBIT IV

Geographic Breakdown of Annual Revenue, 2020



Source(s): Company Filings

Industry Overview

The Mosaic Company operates in two main business segments: phosphate and potash crop nutrients. Their phosphates business segment owns and operates mines and production facilities to produce concentrated phosphate crop nutrients and phosphate-based animal feed ingredients. Their potash segment will own and operate potash mines and production facilities for animal feed ingredients and industrial products. Because of this, the industry plays a key driver in the success of the business.

Overview

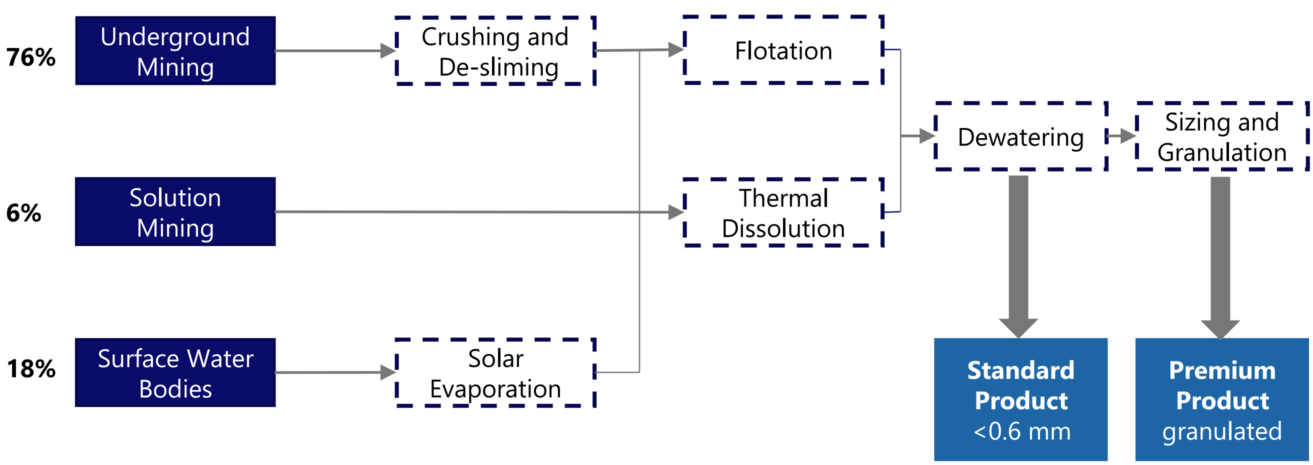
A typical fertilizer requires nitrogen, phosphate, and potassium. Potash contains potassium in water-soluble form. Underground mining is the primary method of extracting potash ore, which use conventional mining methods such as continuous miners and longwalls. The ore is then transported in conveyor belts from the mine to the bottom of the shaft, where it is then hauled to the surface for processing.

Another method of mining potash ore is through solution mining when the deposit is buried at greater than 1,000 meters and conventional mining is not practical. In this case, brine is injected at high temperatures to dissolve potash salt, which is then pumped back to the surface where the potash can be recovered. Finally, sometimes potash deposits are accessible at the ground level in the form of surface water bodies.

Fertilizers are also the primary end use of potash, which account for approximately 90% of global demand. This fertilizer is applied during sowing, and the amount of potash used depends on a range of factors including the soil type, the amount of potassium already present in the soil, and the amount of recycling organic residue. Potash will help crops grow, improve yield, and improve the quality of crops. Industry demand for potash also accounts for approximately 10% of global demand. These applications include aluminium recycling, oil-well drilling, and water softening.

EXHIBIT V

Potash Production and Value Chain



Source(s): Goldman Sachs

Industry Overview

Key Drivers of Demand

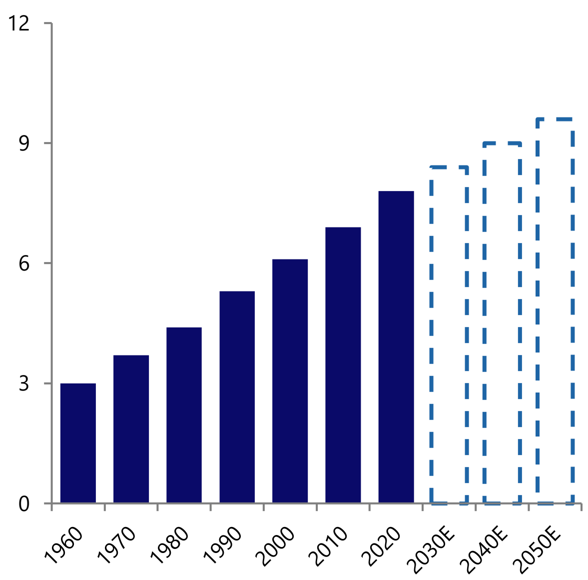
One of the key drivers of potash demand is that the global population is expected to grow. The UN forecasts the global population to increase to 9.6B by 2050. There are also projected to be 80 million more people to feed every year, which increases demand. This is in conjunction with rising income levels which are driving an increase in the average number of calories consumed per capita. In addition, arable land is finite, so the agricultural sector will need to meet the growing demand for food by increasing the average yield per hectare. Potash demand is expected to grow at an average of 3.1%. This is partially due to strong Chinese import demand with yields declining globally. Overall, fertilizer is also very affordable and represents the lowest percent of operating costs in a decade.

The U.S. farmers in general are also increasing their willingness to spend on fertilizer because of falling debt to assets and debt to equity, so farmers have more disposable income.

Potash demand is driven by the need to improve agricultural yields, especially in emerging markets where output per hectare lags significantly behind those in other regions such as Europe, North America, and Northeast Asia. Food consumption has been increasing, and current intake per capita is approximately 30% above the level in 1962. Producers also have experienced consistently high margins recently, and high prices will likely be sustained in recent years. Currently, there exists a market oligopoly as specific companies control the majority of the market, however, this may weaken as new entrants continue to expand their production capacity.

EXHIBIT VI

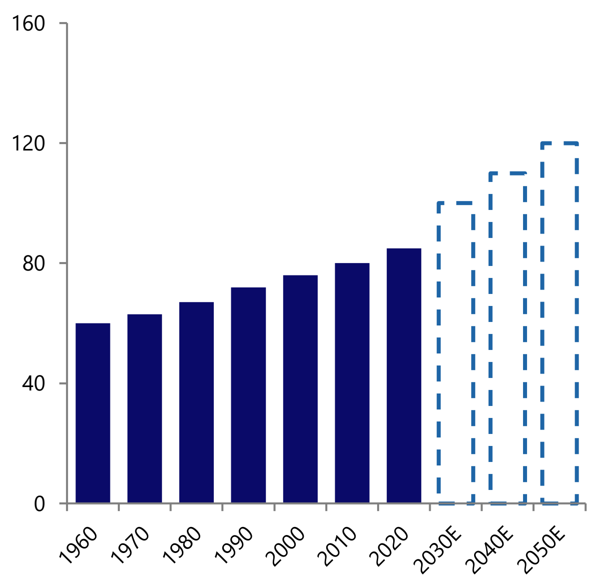
Global Population (B)



Source(s): UN, FAO

EXHIBIT VII

Protein Consumption per Capita (g/day)



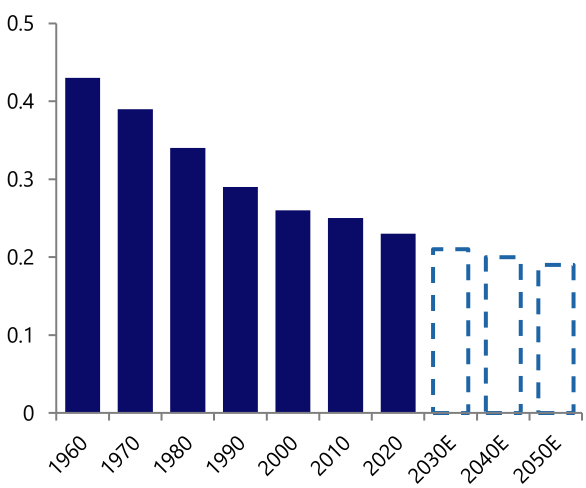
Source(s): UN, FAO

Industry Overview

The potash industry as a whole has relatively high barriers to entry in the form of high capital costs and relative geological scarcity. This creates attractive industry dynamics, suggesting that the current market leaders will continue to be market leaders in the future. Firstly, there are high capital costs of US$1,000 per tonne of production capacity to develop new deposits. These capital costs are not readily available to new companies, which means that larger companies who have access to more capital are able to be more successful. Secondly, there is relative geographic scarcity, as just three countries account for more than 60% of global production. As arable land is nearly impossible to create, companies that own arable land will remain at the forefront of the industry. However, the development of incremental production capacity outside of the current oligopoly may gradually erode the profitability of the potash industry. This means that the risk of oversupply may gradually erode the profitability of the potash industry and potentially create the risk of oversupply

EXHIBIT VIII

Arable Land per Capita (Ha)

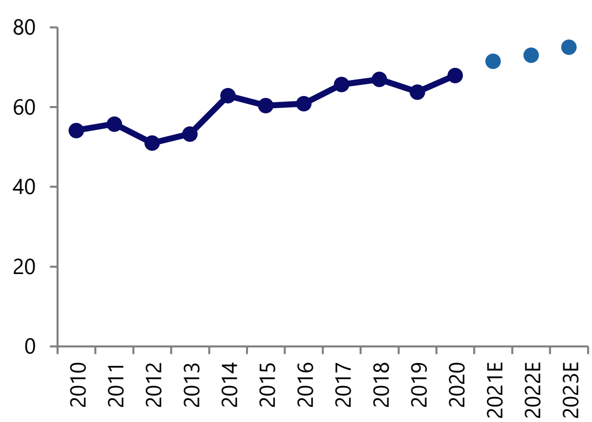


Source(S): UN, FAO

Fertilizer use is also driven by crop cycles. In any crop cycle, farmers will increase or decrease fertilizer use depending on factors such as weather, crop prices, and inventory levels. These factors may be difficult to forecast in any given year, however, there are three current key drivers that drive demand for potash. Firstly, there is the demand from the OECD markets. Currently, potash consumption in the OECD is dominated by large agricultural producers that are based in the US, the EU, Canada, and Australia. The agricultural sector in these countries is relatively mature and technologically sophisticated, so current crop yields are high and farmers have limited upside from increased fertilizer use. Secondly, emerging markets are expected to increase fertilizer use, especially in countries outside of the OECD where food security is a major concern. Thirdly, in the fertilizer that is currently being used, there has been a greater reliance on other commodities such as nitrogen, however, they are being rebalanced to include a greater portion of potassium. This means that it is projected that fertilizer demand will outpace crop output, suggesting that the global rate of fertilizer use will increase at a global rate of 1.8%.

EXHIBIT IX

Global Shipments Demand of Potash (M mt)



Source(s): Scotiabank

Industry Overview

Cost Drivers

There are several key drivers of production costs for potash, including labour costs, mine depth, ore grade, and site-specific factors. Firstly, potash production is relatively labour intensive, and the average labour productivity ranges from 0.5 to 2K tonnes of product per employee per year. This can be a substantial difference when compared to the productivity of other commodities such as coal mining, with has productivity rates of up to 10K tonners per employee. Due to this, the differences in wages and labour productivity across countries and between companies will have a strong impact on its cost curve. Secondly, the deepness of the mine shaft will have a significant impact. The deeper the mine shaft, the higher the costs of taking the potash ore to the surface. Deeper mines also incur higher operating costs through staff and equipment fees. Thirdly, ore grade plays an important role because the higher the ore grade in the potash deposit, the less material there is that needs to be mined and processed to deliver one tonne of the finished product. Fourthly, site-specific factors also contribute as some benefit from weather that is better for solar evaporation, which lowers energy costs.

Potash Market Trends

Currently, the land is also a finite resource but demand for food will continue to grow. The area of arable land has remained largely stagnant for the past 20 years. In 2019, global arable land has amounted to approximately 1.4B hectares, which has remained relatively stagnant for the past few decades. Arable land has actually shrunk in North America and Europe, which has been offset by increases in South America, Africa, and Asia. In most regions, land per capita has shrunk the past few years, which compounds the trend of unequal distribution of land. This suggests that there will be increased demand for fertilizer in the short and long-term future because countries need to be able to make better use of their limited land, especially as the arable land per capita decreases. It should be noted that agricultural output has increased sufficiently to maintain relatively stable food prices over a long period of time. However, there was an inflection point in 2007 when analyzing key agricultural products (beef, corn, rice, soybean, and wheat), where food prices started to increase.

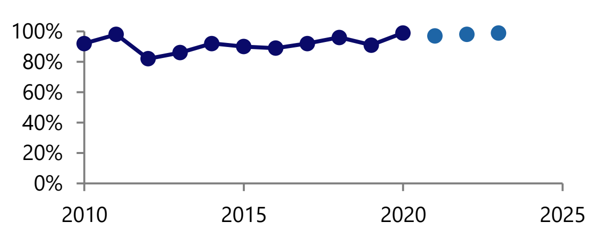
Potash reserves and production are highly concentrated, with 3 countries accounting for 89% and 64% of the global total, respectively. This geographical concentration is replaced at a company level as well, with the top two suppliers having a much larger share of the export market in potash than in other bulk commodities. The Mosaic Company is one of the companies that are included in the market oligopoly of potash. In 2021, global shipments are also projected to hit an all-time high at 71.5M mt versus 68M mt and 65M mt over the past two years.

Phosphates Market Trends

There are limited new supply and capacity removals in China, which should result in incremental production not being able to keep up with annual demand growth. This means that it is likely that global utilization rates will rise, putting upward pressure on supply-driven pricing. Typically, phosphate pricing is demand-driven. Recently, global demand growth has averaged 1.9% annually between 2010 and 2020, but annual demand growth is expected to average 2.2% through 2024.

EXHIBIT X

Global Utilization Rates



Source(s): Scotiabank

Thesis I: Well-Positioned with Strong Agriculture Fundamentals

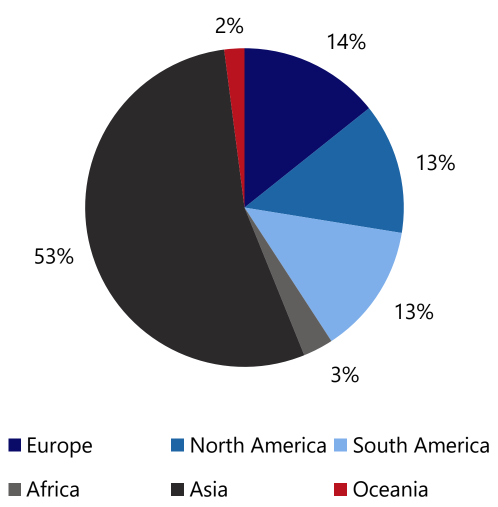
There are strong underlying agriculture fundamentals that drive the demand for potash and phosphate fertilizers. Recently, phosphate and potash prices have continued to outperform, and the Mosaic Company is well-positioned in a growing industry. Recently, there have been high crop prices that support high fertilizer prices, and this trend is expected to carry into 2022. Furthermore, in the short-term, there is a seasonally stronger fall application season as farmers in North America continue to apply fertilizers post-harvest and South America planting activity increases. The phosphate market is expected to remain strong as demand outpaces new capacity additions. Furthermore, potash demand will likely outstrip supply to ensure that inventories are balanced and that prices are elevated. Mosaic expects there to be strong fertilizer market conditions due to tight phosphate and potash markets, especially with the lack of new supply. This will mean more elevated cash flows in future years.

Strong phosphate markets will continue into the future especially with high crop prices and low inventories driving strong demand. The management team noted that there are very limited new projects in the pipeline which limits the ability for new supplies to come online quickly. There are various logistical challenges and ethical issues with minerals, meaning that new projects require at least 5 years before they are able to generate revenue, which creates significant barriers to entry in the industry that Mosaic has passed already.

Potash markets also have the potential to strengthen with new China and India contracts, especially as the management team expects potash to strengthen. Outside of the idled capacity of Mosaic and Nutrien, a new supply of potash will take a significant amount of time to go online and enter into the market. In the short term, China is expected to require a potash contract, especially as demand is strong and inventories are low.

EXHIBIT XI

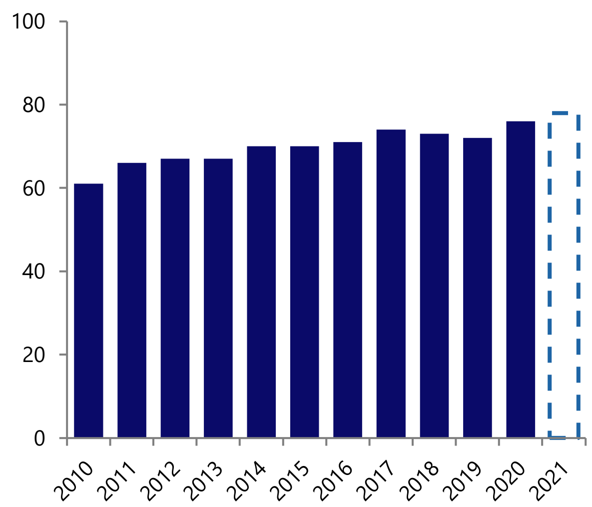
Fertilizer Consumption by Region (2019)



Source(s): Company Filings

EXHIBIT XII

Global Phosphate Demand (M mt)



Source(s): Company Filings

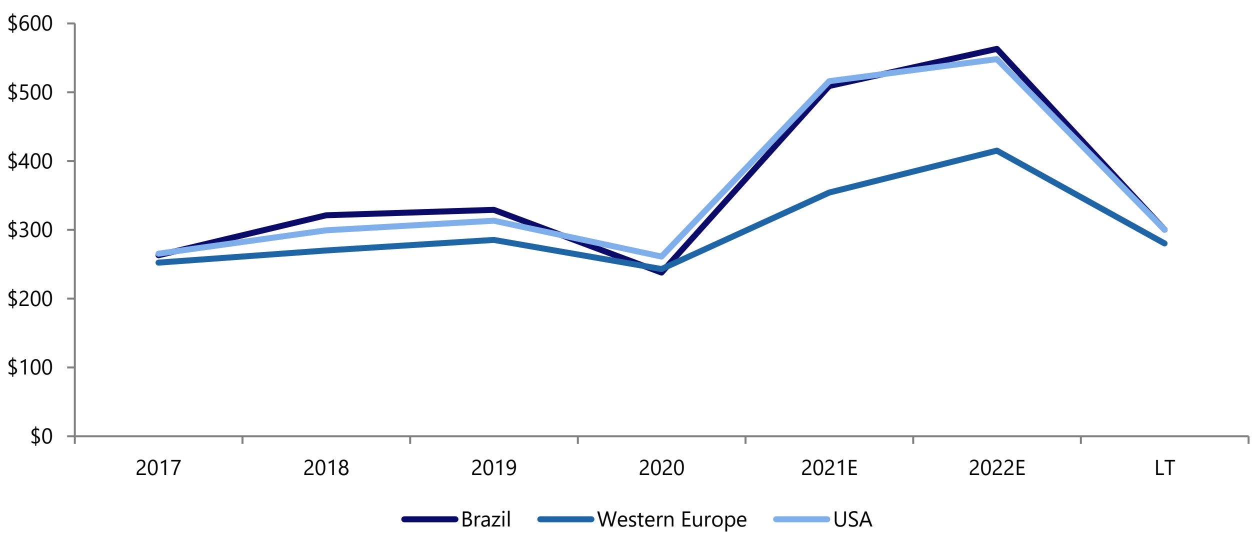
Thesis I: Well-Positioned with Strong Agriculture Fundamentals

Mosaic is currently the fourth-largest potash producer and the largest integrated phosphates producer. Mosaic is well-positioned to benefit from the phosphate and potash market conditions. The Company will benefit from long-term cost-saving initiatives, improved potash prices, and a strong agricultural market, particularly in Brazil. By initiating several cost-saving initiatives, Mosaic will be able to better compete, especially if there is a potash price downturn. It plans to realize several cost savings through its Esterhazy K3 mine. Its Esterhazy mine in Saskatchewan is the largest potash complex in the world with 6.3 mt of capability. Mosaic also plans on introducing more advanced mining technologies such as remote mining and automation transformation initiatives at the Brazil Fertilizantes business, which will improve its value-add premium products. Mosaic has been reducing its potash cash cost profile to ~$62/mt (Q2/21) from $121/mt (2013) and plans to continue these measures. These cost savings initiatives mean that Mosaic will be in a better cost position in the long run, which is essential in a commoditized business.

The Company is also increasing production, for example through its Colonsay potash mine, which was previously idle. This will add more production and offset the early closure of the Esterhazy K1/K2 shaft, lowering potash cash costs. Its Brazil-based business that it acquired in 2018 also realized run-rate synergies of >$300M by the end of 2019, and more synergies are planning on being realized. The construction of the Esterhazy K3 potash project will also reduce the production risk from the K1 and K2 projects and improve production. These factors help Mosaic to improve its scale, and by being able to produce more, the Company can better capitalize on improved potash prices.

EXHIBIT XIII

Potash Price (CFR, $/mt)



Source(s): Scotiabank

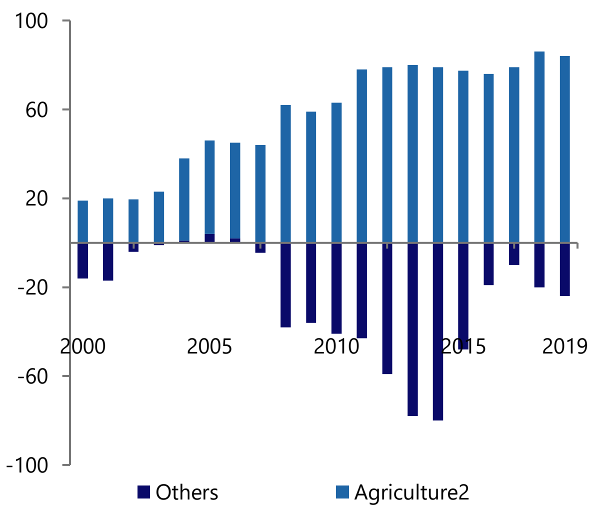
Thesis II: Leading Player in Attractive Brazilian Production Market

The Metals & Mining team points out The Mosaic Company as the most unique differentiator among QUIC's investible universe as it is the only company with significant exposure to South America, namely in Brazil. Leveraging market tailwinds, the team believes Mosaic is best positioned to capture upcoming growth in the space vs competitors because of this advantage.

Brazil is the world's largest and fastest growing agriculture market, which Mosaic broke into in 2016 with the acquisition of Vale S.A. Initially, the deal was controversial with shareholders, yet today, is arguably the most strategically sound and well-timed investment in QUIC's fertilizer coverage. While competitors in the investible universe such as CF Holdings allocated billions to new capacity and Potash Corp sold into the trough, Mosaic realized the more attractive opportunity to expand and deepen roots in the world's fastest growing agriculture market, which supports the conviction for trust in management's capital allocation, further discussed in Thesis III.

EXHIBIT XIV

Brazil's Trade Balance ($B USD), 2019



Source(s): BACEN, USDA, ANDA, Conab and MDIC

EXHIBIT XV

Brazil's Global Position by Commodity, 2019

Commodity	Global Production	World Production Rank	Global Export	World Export Rank	Fertilizer Demand
Soybean	37%	1st	51%	1st	44%
Corn	9%	3rd	9%	2nd	15%
Sugar	16%	2nd	36%	1st	12%
Ethanol	24%	2nd	28%	2nd	12%
Coffee	37%	1st	29%	1st	5%
Cotton	11%	4th	20%	2nd	5%
Citrus	58%	1st	72%	1st	1%

Source(s): BACEN, USDA, ANDA, Conab and MDIC

The $2.5 billion buyout of Brazil-based Vale S.A.'s Fertilizantes business has made Mosaic the leading fertilizer manufacturing and distribution company in Brazil. Mosaic currently accounts for 100% of potash production and 70% of phosphate crop nutrients with ~25% of Brazilian market access. In 2019, the buyout generated ~$330 million in annual net synergies, which is in excess of the company's $275 million target. It also provides considerable leverage to improvements in the crop nutrient business cycle to the company. Mosaic has completed the integration of the acquired business and achieved $115 million in Fertilizantes' transformational savings in 2020. Moreover, Mosaic plans to drive an additional $230 million in annual operating earnings benefit through business transformation actions by the end of 2023.

Looking forward, Mosaic's Brazil exposure should enable the company to outperform peers. The Brazilian government encourages agribusiness with exports tax exemptions, public railway and port concessions, and infrastructure improvements, such as the BR-163 Annual Crop Plan paving. Brazil is also the world's largest producer and exporter of coffee, sugar, and orange juice, and is highly ranked in the production and export of other goods such as soybeans and corn. Due to the affordable ratio between agriculture commodity prices and fertilizer prices, Brazil agribusiness will continue to be strong.

Thesis III: Intelligent Capital Allocators

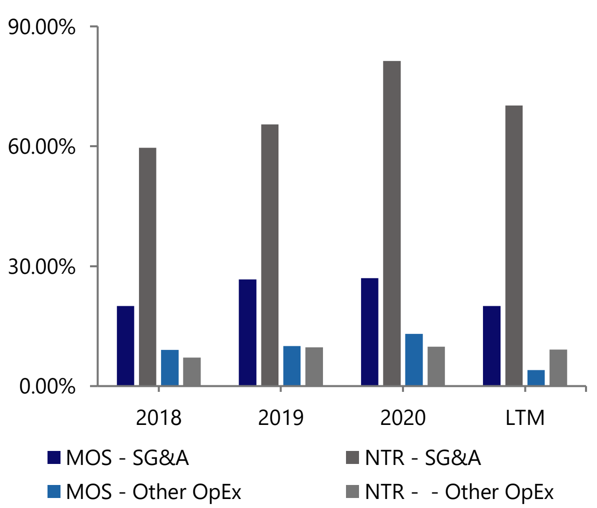
In assessing the agriculture competitive landscape, the Metals & Mining Team views the Mosaic Company favourably in the long-term due to the management's proven capital allocation history and forward-looking capital allocation plans.

Cost Cutting

Beginning in 2019, The Mosaic Company has taken aggressive actions to cut costs amid a still challenging operating environment through its cost-cutting program, leading to an improvement in its operating cost structure. It is particularly making progress in controlling its per ton selling, general and administrative (SG&A) expenses and continues to benefit from its extensive cost transformation work. Mosaic has done this by integrating supply chain operations through a centralized, fully automated and digitized performance management system and fully integrated logistics control centers. Through minimal human intervention, the company minimizes supply chain operation risks and a shared service center imbeds unit cost savings. From these investments, Mosaic's integration improvements are expected to save ~15million, ~$30 million, and ~$50 million in transportation costs in 2021, 2022, and 2023, respectively, on ~$15 million investment costs in 2021 and 2022. Mosaic also continues to drive down cash costs of production in the Potash business with transition of production from Colonsay to lower cost K3. Mosaic realized around $100 million of benefits from this move in 2020 and is seeing lower brine management costs as the development K3 approaches completion. The company's efforts to centralize and automate mining operations and reduces costs and will assists its target to reducing its potash and phosphate MOP full cost per ton to $85> and $75>, respectively, by 2023, which are among the lowest guidance prices across competitors.

EXHIBIT XVI

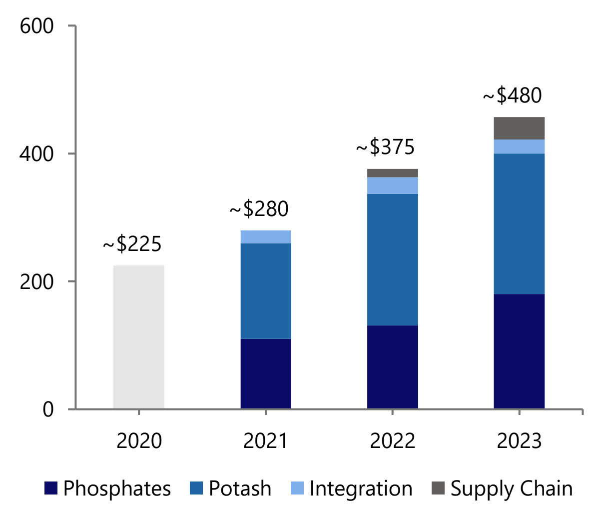
Mosaic vs QUIC Coverage Average: Expenses to EBITDA (%) Comparison, 2018 - LTM



Source(s): S&P Capital IQ

EXHIBIT XVII

Mosaic Expected EBITDA Increases by Identifies Initiatives ($M USD), 2020 - 2023



Source(s): Company Filings

Thesis III: Intelligent Capital Allocators (cont.)

Lowering Debt

In 2021, The Mosaic Company also aims to strengthen its balance sheet by lowering debt by $1 billion and maintaining at least a Baa/BBB credit metrics through the cycle. At the end of Q2FY2021, Mosaic's total debt was $3,968 million, sequentially down from $3,971 million at the end of Q1FY2021. Moreover, its cash and cash equivalents climbed ~30% year over year to $1,417.6 million as of June 30, 2021. The company's current time-interest-earned ratio of 8 at the end of the Q2FY2021 also rose from 4.9 in the prior quarter, suggesting a lower default risk. The company will continue to build its strong liquidity position of more than $4 billion, which appears to be adequate to meet its short-term debt obligations**.**

Return Capital to Shareholders

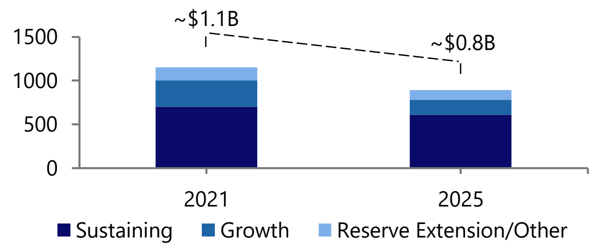
The Mosaic Company management team has shared that with excess cash, the company intends to develop shareholder value by i) taking advantage of M&A opportunities and/or, ii) directly repurchasing company stock. In 2021, Mosaic acted on this with a $114 million investment to increase its annual dividend 50% from $0.20 per share to $0.30 per share as well as a $1 billion share repurchase authorization. Looking forward, with a ~$300 million decrease in capex by 2025, the company has alluded to similar actions taking place in the future as management views 2021 as the highwater mark for total capex.

Conclusion

Despite operational hurdles induced by COVID-19, Metals & Mining views Mosaic's performance in 2020 as a better reflection of its initiatives and market position than 2019, when the agriculture market experienced lower prices. This is a testament to Mosaic's strength which has enabled them to improve its net income 162% YoY and dividend rate by 50% in October 2021. Moving forward, Mosaic's proven and forward-looking capital allocation strategy should continue to drive considerable investment merit.

EXHIBIT XVIII

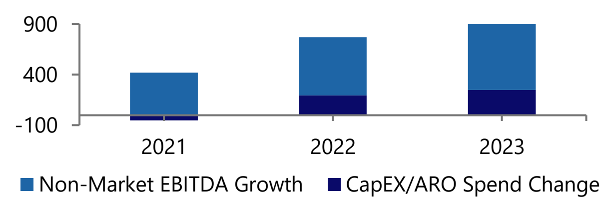
Expected Capital Expenditures ($M USD)



Source(s): Company Filings

EXHIBIT XIX

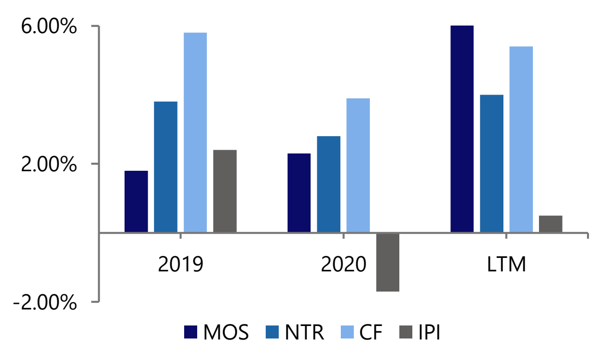
Expected FCF Growth Pre-Market Impact ($M USD)



Source(s): Company Filings

EXHIBIT XX

Mosaic vs Competitors ROIC, 2019 - LTM



Source(s): S&P Capital IQ

Valuation: Comparable Companies & Discounted Cash Flow

In order to determine the fair value of The Mosaic Company, a comparable companies analysis was conduction. As Mosaic is primarily a potash and phosphate producer, we selected peers in the mineral fertilizer industry with various sizes.

Mosaic appears to be trading at a discount to its peers on numerous multiples, but it is difficult to determine whether this can be justified and whether Mosaic is currently undervalued. Although the comparable analysis serves as a good benchmark, metrics such as EV/EBITDA and P/E are not relevant metrics for a asset-heavy commodity business. Thus, the team believes more weight should be given the intrinsic value, and a discounted cash flow analysis was also conducted.

A 41.91% increase in revenue was forecasted between 2020 and 2021, and the revenue growth thereafter remains steady. The increase can be attributed to two factors. Firstly, Mosaic's phosphate segment was impacted significantly in 2020 due to low cost imports from Russia and Morocco. After the US International Trade Commission and the Department of Commerce imposed a 20% tariff on imports in 2021, phosphate prices of risen significantly and benefiting Mosaic's business segment. Secondly, with the macro trend of steady population growth, rising grain prices, and higher grain export to China, the demand for mineral fertilizers have also risen in pace.

The team also forecasted increase in capital expenditure in the near term. In order to maintain the same level of annual production of potash, and given the suspension due to brine inflow at Esterhazy K1 and K2 sites, our predicted that Mosaic will have new projects underway.

Mosaic 's weighted average cost of capital was 4.80%, and this was justified by the fact that Mosaic has superior capital allocation capabilities and a graphically diverse operation. Based on these assumptions, the implied share price arrives at $38.80, which is 6% lower than the current share price of $41.47. This aligns with our view that Mosaic is a high quality business but is priced too dearly at the moment.

EXHIBIT XXI

Comparable Companies Valuation – Agriculture

Agriculture	Market	Enterprise	EV/EBITDA			P/CF	Dividend	Price/Earnings		Net Debt/EBITDA	
	Cap ($MM)	Value ($MM)	LTM	2021E	2022E	LTM	Yield	2021E	2022E	2021E	2022E
Nutrien Ltd.	$50,358	$62,362	11.8x	6.9x	7.5x	nmf	2.6%	14.1x	13.0x	2.8x	2.5x
Corteva, Inc.	$39,517	$38,426	9.2x	11.0x	10.6x	12.2x	1.3%	21.2x	17.3x	nmf	2.3x
CF Industries Holdings, Inc.	$15,699	$22,974	9.8x	6.9x	7.4x	16.1x	2.0%	13.1x	11.6x	nmf	2.3x
CVR Partners, LP	$1,058	$1,806	15.8x	nmf	nmf	20.8x	8.6%	nmf	nmf	nmf	2.3x
Intrepid Potash, Inc.	$672	$645	12.3x	7.3x	6.5x	11.4x	nmf	nmf	nmf	nmf	1.0x
Mean	**$21,461**	**$25,242**	**11.7x**	**8.0x**	**6.4x**	**15.1x**	**3.6%**	**16.1x**	**14.0x**	**2.8x**	**2.1x**
Median	**$15,699**	**$22,974**	**11.8x**	**7.1x**	**7.4x**	**14.2x**	**2.3%**	**14.1x**	**13.0x**	**2.8x**	**2.3x**
Maximum	$50,358	$62,362	15.8x	11.0x	10.6x	20.8x	8.6%	21.2x	17.3x	2.8x	2.5x
75th Percentile	$39,517	$38,426	12.3x	8.2x	7.5x	17.3x	4.1%	17.6x	15.2x	2.8x	2.3x
Median	$15,699	$22,974	11.8x	7.1x	7.4x	14.2x	2.3%	14.1x	13.0x	2.8x	2.3x
25th Percentile	$1,058	$1,806	9.8x	6.9x	6.5x	12.0x	1.8%	13.6x	12.3x	2.8x	2.3x
Minimum	$672	$645	9.2x	6.9x	0.0x	11.4x	1.3%	13.1x	11.6x	2.8x	1.0x
The Mosaic Company	$19,489	$23,663	7.8x	4.6x	5.5x	15.0x	0.7%	8.5x	9.0x	nmf	2.3x

Source(s): Capital IQ

EXHIBIT XXII

Discounted Cash Flow Analysis

DCF	2021E	2022E	2023E	2024E	2025E
Revenue	$12,320.06	$12,472.88	$11,339.87	$11,022.47	$11,921.26
Revenue Growth %	41.91%	1.2%	-9.1%	-2.8%	8.2%
Cost of goods sold	$10,964.85	$11,100.86	$10,092.48	$9,810.00	$10,609.92
Gross Margin	$1,355.21	$1,372.02	$1,247.39	$1,212.47	$1,311.34
SG&A	$751.20	$742.37	$734.39	$721.35	$715.28
EBITDA	$2,203.53	$2,425.08	$2,276.62	$2,236.18	$2,157.75
Margin (%)	17.9%	19.4%	20.1%	20.3%	18.1%
Less: Depreciation & Amortization	-$1,201.93	-$1,187.80	-$1,175.03	-$1,154.16	-$1,144.44
Operating Income	$1,001.60	$1,237.29	$1,101.59	$1,082.02	$1,013.31
Less: Taxes	-$300.48	-$371.19	-$330.48	-$324.61	-$303.99
Plus: Depreciation & Amortization	$1,201.93	$1,187.80	$1,175.03	$1,154.16	$1,144.44
Less: Net Working Capital	-$74.12	$67.77	-$24.29	$9.91	-$10.01
Less: Capital Expenditure	-$1,240.00	-$1,100.00	-$920.00	-$800.00	-$800.00
Unlevered Free Cash Flow	$588.93	$1,021.67	$1,001.85	$1,121.48	$1,043.75

WACC Calculation	
Capital Structure	
Equity %	77.30%
Debt %	22.70%
Preferred Equity %	0%
Cost of Equity	
Risk-free Rate	1.57%
Market Risk Premium	4.84%
Levered Beta	0.8
Cost of Equity	5.28%
Cost of Debt	
Pre-tax Cost of Debt	4.50%
Tax Rate	30%
After-tax Cost of Debt	3.15%
WACC	4.80%

Implied Valuation	
WACC	4.80%
Terminal EBITDA Multiple	7.8x
2025E EBITDA	$2,157.75
Implied Terminal Value	$16,830.43
PV of UFCF	$4,118.39
Implied Enterprise Value	$20,948.83
Less: Net Debt	6209
Implied Equity Value	$14,739.83
Shares Outstanding (mm)	379.9
Implied Share Price	$38.80
Current Share Price	41.47
Implied Downside	-6%

Source(s): JP Morgan, RBC Capital Markets, Capital IQ

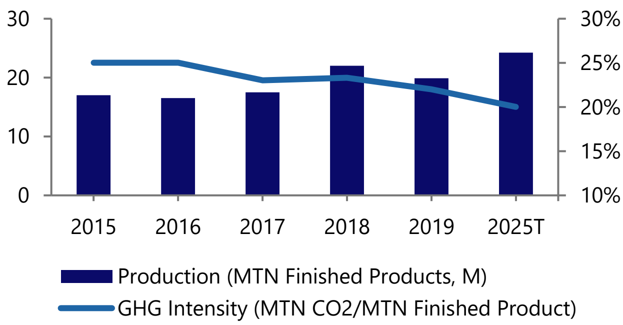
ESG Consideration

As part of Metals & Mining's 2022 fiscal year goal to consider environmental, social, and governance (ESG) factors in investment decisions, the team believes that The Mosaic Company demonstrates superior commitment to ESG-improvement compared to competitors based on forward-looking missions and to-date performance.

Environmentally, Mosaic has reduced companywide green house gas (GHG) emissions by 13% since 2015. The company has been able to achieve this through site-level accountability enhancement, data governance, and project exploration, and is redoubling their initial commitment to 2025.

EXHIBIT XXIII

GHG Emissions Intensity, 2015 - 2025



Source(s): Company Filings, Investor Presentation

Socially, the company has validated a 4R acre programs currently in agriculture regions in 11 states and provinces. The 4R program consists of "right source, right rate, right time, and right place" principles that empowers farmers to reduce the impact of crop nutrients on the environment; the program has avoided 5+ million tonnes of phosphorous in Lake Erie as a result. Through financial support and/or as a representative of governing body, the company aims to 5x its 2020 5+ million acres under management to 25+ million acres in 2025.

EXHIBIT XXIV

North American 4R Acre Program, 2020

Source(s): Company Filings, Investor Presentation

In viewing governance, the company has also built strong accountability underpinned by the recent introduction of the Environment, Health, Safety, and Sustainable Development Board (EHSS) of Directors Committee; the EHSS committee has implemented 13 ESG performance targets, including a goal of 15% Indigenous representation by 2025 across three pillars: community investment, workforce new hires, and procurement.

In action, The Mosaic Company continues to be considerate economic and sustainability value in their projects, including the Esterhazy K3 Expansion with world-class potash GHG performance, on track to achieve additional reductions. Overall, due to Mosaic's significant strides in ESG practices, the company ranks top in Carbon Disclosure Project (CDP) ratings amongst QUIC's Metals & Mining investible universe with an A- score (with the next highest CDP ranked company scoring a B level).

Risks & Conclusion

Risks

Like many commodity companies, Mosaic faces many business and operational risks namely related to fluctuating commodity pricing, risky asset location, and disruptions to mining operations.

A fundamental risk to Mosaic's business is fluctuations in the market pricing of its different crop nutrients. Worldwide supply and demand factors, outside the realm of Mosaic's control, are fundamental to its ability to generate revenues and profits. This holds true for Mosaic's inputs for products like ammonia, sulfur, and phosphate rock where global price increase can hurt Mosaic's profitability. This is a reality for the whole agriculture industry which largely sells undifferentiated and thus commoditized products. As a result, this risk by itself is not a barrier to an investment in this company.

Another risk more unique to Mosaic in the agriculture industry is the geopolitical risk in the locations of Mosaic's operations. While advantageous in many regards, Mosaic's high concentration in Brazil lends itself to changing policies, government corruption and other potentially negative consequences. This is furthered by presence in India, Paraguay, Peru and China.

A notable risk facing Mosaic that recently took form is disruptions in mine operations due to flooding and other operational issues. The company's Esterhazy mine has had an inflow of salt saturated brine forcing them to accelerate the shutdown of their K1 and K2 mines in Saskatchewan in June of 2021. Other similar mines that do shaft mining are exposed to this similar risk which could serve to be very damaging to the business.

While none of these individual risks are notable enough to prevent investment in this business, they are significant to the point where the M&M team believes a greater margin of safety is required to invest in the business.

Conclusion

Overall, Mosaic offered an attractive opportunity to the QUIC M&M team because it would mean greater exposure to the agricultural sector. It is also an extremely high quality company in an oligopolistic industry. Furthermore, recently crop prices have done particularly well due to strong demand. However, there is greater uncertainty in the long-term because although there will likely be continued demand, there will also be heightened supply which will have an adverse effect on crop prices.

The Company offered an attractive investment profile, for example being well-positioned in a growing industry, being a leading player in an attractive Brazilian market, and the management team is highly effective at allocating capital. Valuation was also conducted, and it was determined that it is priced relatively highly currently due to short-term tailwinds in the industry. The implied value of the company was at $38.80 per share, which is a slight discount to its current price. It is also difficult to predict what crop prices are likely to be like in the long-term future. This creates greater macroeconomic uncertainty, especially as crop prices are cyclical. Because of this, the QUIC M&M team plans to continue to monitor Mosaic as well as the industry as a whole before investing in the company.

References

1. ANDA
2. BACEN
3. Company Filings
4. Conab
5. Food and Agriculture Organization (FAO)
6. Goldman Sachs
7. Google Images
8. JP Morgan
9. MDIC
10. RBC Capital Markets
11. S&P Capital IQ
12. Scotiabank
13. United Nations (UN)
14. USDA