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DECEMBER 12, 2016

INITIATING COVERAGE REPORT

Santa Fe Gold Corp

OTC SFEG
Current Stock Price: $0.044
Cohen Price Index Target: $0.31

INVESTMENT HIGHLIGHTS

Overview of the Company

Santa Fe Gold (OTC SFEG) is a US based acquisition exploration and mining company. The Company analyses and acquires economically viable properties for mining gold, silver and other precious metals. SFEG has recently acquired, controls and now owns approximately 53 million tons of valuable gold, silver, copper and other precious metals properties. The Company is in advanced negotiations to acquire, several accretive highly coveted acquisitions, including high grade tailings and other very rich ore bodies, as well as substantial milling capacity and infrastructure, as yet unannounced.

Scalable Business Concept

The restructured Company's new focus is to unlock the enormous production potential of Southwestern New Mexico and Arizona, comprising about 80% of all gold and silver in this area of the USA. These districts contain some of the highest grade ore deposits and concentrated mineralization anywhere in the world. With mill and concentrating capacity, SFEG is rolling up an unprecedented portfolio of assets. The Company has a unique and proprietary knowledge of the hidden value of many of these deposits and brings multi-decade experience needed to produce Gold and Silver with substantial revenues and long mine lives measured in decades rather than years.

Business Model:

The Company's goal is to produce significant revenues and cash flows from many valuable properties containing precious metals holdings. The Company has created a portfolio of high quality exploration and bankable development projects that will ensure strong future revenue growth. SFEG is focused on acquiring the very highest value ore deposits available. When acquired, SFEG intends to initiate full scale production or sell ore targeting lower economies of scale. Product can be processed in the plant itself or transported to other processing structures.

Stock Details

Symbol	**SFEG**
Exchange	**OTC**
52 Week High/ Low	**$0.07/$0.0005**
Average Vol (30 days)	**93,128**
Shares Out (in mn)	**139.59**
Market Cap (in $ mn)	**$6.18**
Float	**58.39%**

Share Performance

Key Management Personal

Tom Laws,
CEO

Frank G. Mueller,
CFO, Corporate Secretary, Officer

Erich Hofer,
Chairman, President, Special Committee Chairman, Compensation Committee Chairman

Please refer Disclaimer on Page 151

Management

Tom Laws, new CEO, has multi-decade experience, intimate knowledge of assets and their owners, and expertise to recreate the necessary infrastructure and processing capacity needed to convert ore to gold and silver. Compared to its earlier assets, SFEG is acquiring assets that are more valuable and have a longer mining life with more tonnage.

Favorable Market Dynamics

Gold is viewed as a quasi-currency in many parts of the world and regarded as the most popular precious metal for investors. The gold asset acquisition rollup strategy is intended to build a company with significant revenues and cash flows, combined with low operating costs and economies of scale. Our share price valuation is $0.31, 500.6% percentage higher than SFEG's current share price. The stock is an exciting investment opportunity for short and long term risk-averse investors.

Mission Statement

Santa Fe Gold's new CEO and its exploration and acquisition team has the confidence and personal relationships with many of the land owners and mine holders to enable projects to propitiously be brought into production. As a result, Santa Fe is in the unique position of being able to complete its pipeline of planned and ongoing acquisitions quite economically, while at the same time creating immediate and substantial corporate value. In pursuing this new strategy, management has been and continues to execute on its aggressive plan to rapidly transform Santa Fe Gold into a growing and viable operating company. SFEG's business model targets significant assets and an ability to develop cash flows from various deposits and operations that can be brought into production in a timely manner.

Execution of that plan has been management's primary focus over the past few months. The Company has been working diligently to build shareholder value and will continue to acquire high value, quality assets on exceptional terms. This unique window of opportunity exists at this time while metals prices are still attractive. However, should metals prices rise substantially over the next 7 years, this would exponentially increase valuations for SFEG's assets and share price, especially as the Company increases production from multiple mines and high grade ores.

EXECUTIVE SUMMARY

- Santa Fe Gold (OTC SFEG) is a US based acquisition, exploration and mining company with a focus on extracting gold from acquired mining properties and other exciting mining assets it intends to acquire. The Company has lode mining opportunities in Arizona and New Mexico, placer mining opportunities in Playas and Arizona. The Company also has an opportunity to re-mine from available high grade tailings in multiple locations across the South West.
- Santa Fe's original name was Azco Mining. The Company started in 1988 focusing on mining copper. Since 2004, the Company changed its business model and focused on the growing gold mining industry. SFEG is now developing and acquiring mineral assets through organic and inorganic methods targeting precious metals.
- The Company acquired the Summit project in 2006 and then acquired the Lordsburg Mill. It also invested in the Oritz project. SFEG petitioned for Bankruptcy in 2015 and was allowed to continue to manage the existing assets. The Company had a total accumulated deficit since inception of over $90 million in March 2015.
- Since 2016, the Company has changed its management and the Board of Directors and appointed a new CEO, Mr. Tom Laws. Mr. Laws has over 40 years of experience in the mining industry. The Company emerged from voluntary bankruptcy in 2016. Mr. Laws has been pivotal in helping the Company recuperate its assets and add to them through acquisitions.
- In September 2016, The Company announced the engagement of Malone Bailey, LLP as new auditors. The Company also began a series of new acquisitions including the historic Malone, Patanka, Hillcrest, Barranca and Principal Mines incorporating some 20 Mine Sites, recently quadrupling its holdings surrounding the Malone Mines complex.
- Santa Fe intends to restart a mega processing facility and a high capacity mill and may acquire additional milling capacity to process ores from nearby mines. The Company also seeks to invest in a solar farm that could also help to power mining operations and net $1 million annually, potentially payable as a dividend to shareholders.
- In November 2016, SFEG announced the acquisition of assets in the Playas Lake Bed, Hidalgo County, New Mexico. The asset size is three times the recently acquired original Malone Mines complex area and is rich in Gold, Silver, Platinum, Palladium, Copper and other rare metals as well as Titanium ores, with easy accessibility via roadways.
- Risks: Lack of capital. We believe that a capital infusion of $15 million is required. The Company has already formulated a plan for deployment of the new capital. It also intends to immediately begin production utilizing its newly acquired assets on an industrial scale. SFEG does not seek to face capital issues in its day-to-day workings.
- Risks: SFEG is not free from traditional risks for all gold mining companies, although its emphasis on acquiring high grade low cost ores and economically viable operations could insulate it from foreseeable market downturns.
- Risks: SFEG aims to consistently optimize operations and will constantly strive to reduce expenditures so it does not face cash constrained situations. Fluctuations in the price of gold will continue to affect its revenues. However, its experienced management team intends to build substantial revenues and cash flows through rigorous cost controls.
- 2015 was a difficult year for gold prices. However, 2016 has seen the price of gold increase with some companies showing over a 300%+ increase in share prices. Multiple factors including geopolitical and economic instability across the world, high physical demand from India and China, central banks and physical gold ETFs are among the major drivers of the market price of gold. While nobody can forecast long term gold prices, we expect strong gold prices into 2017 and beyond, possibly for next 7 years. Our report outlines our views in gold pricing.

Financial Forecast and Valuations

- Based on our current forecasts, the Company will need to raise at least a total of $15.0 million in equity capital in the near to intermediate term. Provided the Company raises the required capital, we forecast the Company's revenues from operations to increase from $25.7 million in FYE June 2017 to over $157.9 million in FYE-2024.
- The Cohen Price Index Target is calculated using average 2018-2021 forecasted Price-to-Earnings ratio (P/E), Cohen Price-to-Capital Employed ratio (P/CE) and the Cohen Discounted Cash Flow (DCF) method. The P/E and P/CE are based on market multiples and representative of the broader industry in which the Company operates. The last component in calculating the Cohen Price Index Target is value derived using the long-term DCF valuation approach.
- Based on an average of these methods, SFEG common stock is valued at $0.31 per share, 605.0% higher than the current stock price of $0.044 per share. SFEG has regained a strong foundation to grow in the gold mining industry.

RISKS

Fluctuation in the prices of precious metals: The prices of gold and silver have recently increased enabling the Company to invest in technology and assets. However, a drop in prices might make operations at the current level unviable.

Incorrect resource estimates: All calculations concerning a mining company are made based on their resource estimates. Incorrect resource estimation can lead to operational difficulties as well as hindering future prospects.

Lack of Capital: The Company has been able to successfully emerge from bankruptcy and recapitalize with a number of cash infusions. While lack of capital in a capital intensive industry could hurt Company growth the company just engaged International Monetary as its Investment Banking and Strategic Advisor to mitigate risk.

Escalating costs: Even with large capital injections, if the Company is unable to control its costs, production will not be sustainable in the long run. This can affect the Company's profitability in the near and long term.

VALUATION

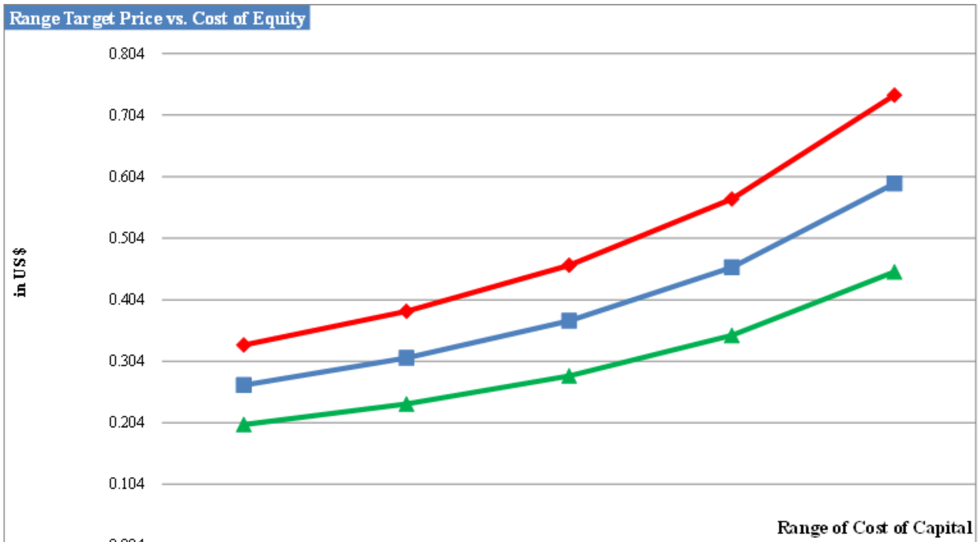
THE COHEN PRICE TARGET™ - $0.31

The Cohen Price Target™ from is a dynamic and logical valuation approach that combines market-based approaches and intrinsic value methodologies. Capital raising and cash are the life blood of any micro-cap/small cap Company. Hence, the Cohen Price Target™ includes three components, 33.3% equal weighted that together reflect and are based on the Company's ability to raise capital for growth. The three components used in our price index are Price-to-Earnings ratio (P/E), Cohen Price-to-Capital Employed ratio (P/CE) (Both Market-based valuation approaches), and Cohen Discounted Cash Flow (DCF) method (Theoretically an Intrinsic Value based approach).

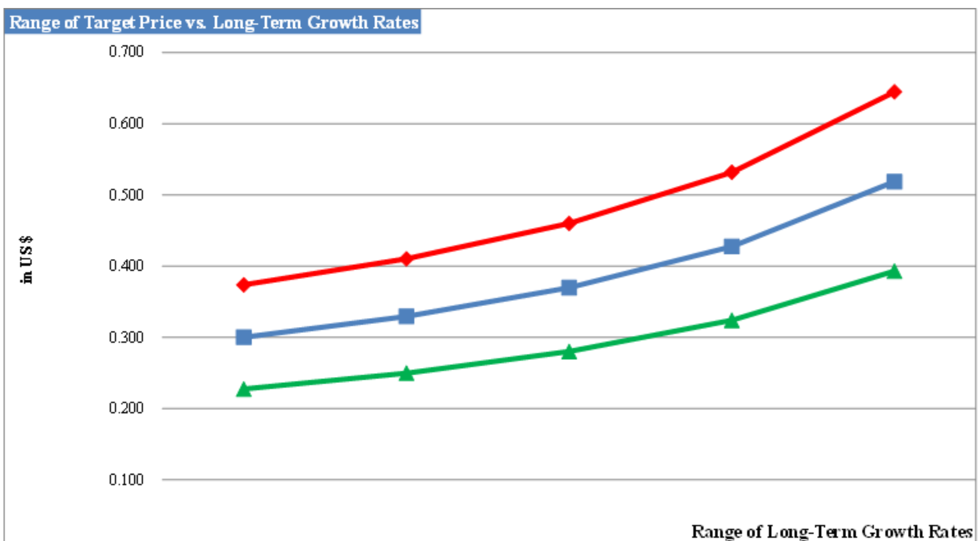
Our formula for The Cohen Price Target™ is shown below.

Figure 1: The Cohen Price Target™ Formula

Price-to-Earnings (P/E)		**in $**
Earnings Per Share (2018-2022 Avg. Forecast)	0.04	
Expected P/E Ratio	12.50	
Discount Factor	0.75	
Price based on P/E Ratio		**0.37**
Price-to-Capital Employed (P/CE)		**in $**
Capital Employed	0.05	
Long term P/CE Ratio	5.00	
Discount Factor	0.75	
Price based on P/CE Ratio		**0.20**
Cohen Discounted Cash Flow Model		**in $**
Cohen DCF Value - Base Case		**0.37**
Cohen Price Index Target		**0.31**
Current Stock Price		0.04
Upside/ (Downside) Potential		**605.0%**



	12.5%	11.5%	10.5%	9.5%	8.5%
Optimistic Case	0.330	0.385	0.460	0.568	0.737
Base Case	0.265	0.309	0.370	0.457	0.593
Pessimistic Case	0.201	0.235	0.280	0.346	0.449



	3.0%	4.0%	5.0%	6.0%	7.0%
Optimistic Case	0.374	0.410	0.460	0.532	0.645
Base Case	0.300	0.330	0.370	0.428	0.519
Pessimistic Case	0.228	0.250	0.280	0.324	0.393

Source: Cohen Grassroots Research

COHEN GROWTH DRIVERS AND FINANCIAL FORECASTS

Figure 2: Cohen Growth Driver Analysis - Base Case

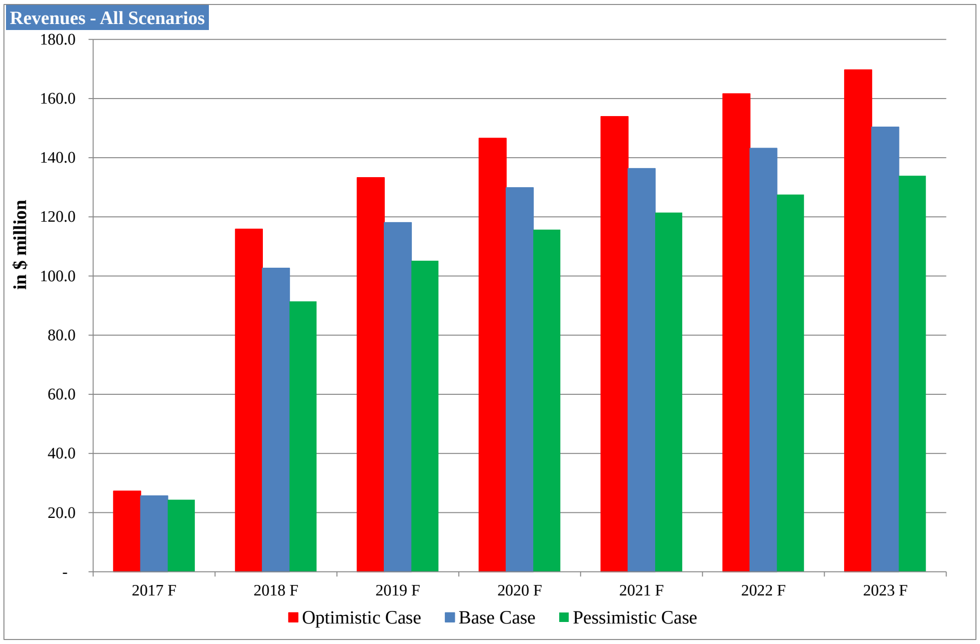
Annual Revenues, Margins, Assets, Turns									
all figures in $ million; unless otherwise mentioned	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Net Revenue	0.1	25.7	102.7	118.1	129.9	136.4	143.2	150.3	157.8
Operating Margin	NM	21.0%	32.1%	29.2%	26.2%	24.0%	22.8%	21.4%	19.8%
Net Margin	NM	2.7%	26.8%	24.5%	21.6%	13.7%	11.9%	11.0%	10.0%
EPS - Diluted	(0.05)	0.00	0.04	0.04	0.04	0.03	0.03	0.02	0.02
EBITDA	(3.2)	10.1	37.9	39.7	39.5	38.5	38.5	38.3	37.7
Free Cash Flow	24.4	(14.8)	(1.5)	24.9	33.9	22.4	20.2	20.6	20.2
Cash and Equivalents	0.4	0.3	1.4	25.8	59.3	81.4	101.3	121.5	141.3
Working Capital	(30.7)	(25.5)	6.0	13.0	10.1	9.9	9.9	9.9	9.8
Total Debt	0.3	-	-	-	-	-	-	-	-
Total Assets	18.2	32.9	46.1	70.9	101.0	121.1	139.3	157.1	174.3
DSO	-	54.8	54.8	54.8	45.6	45.6	45.6	45.6	45.6
Percentage Change in Annual Revenues, Margins, Assets, Turns									
	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Revenues	NM	40000%	300.0%	15.0%	10.0%	5.0%	5.0%	5.0%	5.0%
Operating Margin	NM	NM	52.4%	-8.9%	-10.3%	-8.2%	-5.3%	-6.2%	-7.2%
Net Margin	NM	NM	901%	-8.9%	-11.5%	-36.9%	-13.1%	-7.5%	-8.9%
EPS - Diluted	NM	-102%	3783%	4.8%	-2.6%	-33.8%	-8.8%	-2.9%	-4.3%
EBITDA	NM	-413%	275%	4.8%	-0.5%	-2.5%	0.1%	-0.6%	-1.5%
Free Cash Flow	NM	-161%	-90%	-1736.4%	36.3%	-34.0%	-9.6%	1.7%	-1.8%
Cash	NM	-33%	402%	1811.4%	129.6%	37.2%	24.5%	20.0%	16.3%
Working Capital	NM	-17%	-123%	118.6%	-22.4%	-2.2%	0.4%	-0.3%	-1.1%
Total Debt	NM	-100%	NM	NM	NM	NM	NM	NM	NM
Total Assets	NM	81%	40%	54%	43%	20%	15%	13%	11%
DSO	NM	NM	0%	0.0%	-16.7%	0.0%	0.0%	0.0%	0.0%

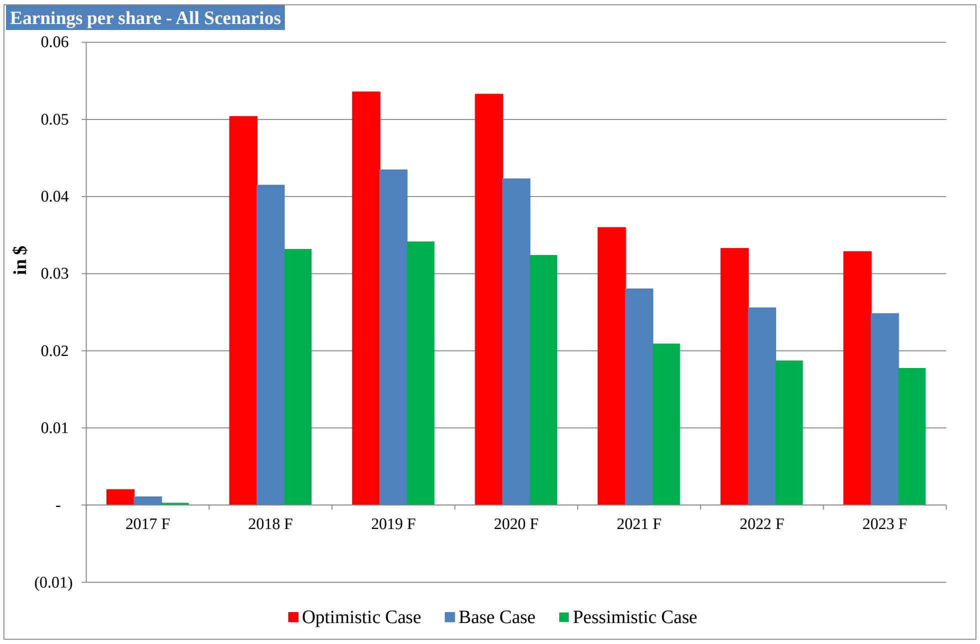
Source: Cohen Grassroots Research

The Cohen Growth Drivers Model is an intelligent roadmap used by many securities analysts to analyze the forecasted growth of a given Company. The Company, as explained in the previous section, is likely to generate revenue from its multiple revenue streams. Development of its programs, partnerships and acquisitions as well as the Company's expansion towards regions other than the US will result in higher income over a period of time.

In addition to our Base Case forecasts, we have prepared financial forecasts under two additional scenarios, the optimistic (aggressive top-line growth) and pessimistic case. The exhibit below shows our revenues and earnings assumptions under all three forecasted scenarios.

Figure 3 – Revenues and EPS under various Scenarios





Source: Cohen Grassroots Research

SFEG VS NULEGACY

Cohen Grassroots Research conducts academic securities analysis to create its valuations and price targets. However, at times there are comparative company share prices that are appropriate to analyze. One such company is NuLegacy Gold. The similarities are listed in the visual below:

Figure 4: Similarities between Santa Fe and NuLegacy

NuLegacy

- Low cost heap-leachable mineralization
- Benign geography with superior logistics
- Politically stable

Santa Fe Gold

- Diverse range of rich, high grade minerals
- Capability to process, simple and complex, oxide and sulfide ores
- Ample availability of water
- Easy connectivity through highways
- Politically stable

Source: Cohen Grassroots Research

NuLegacy has exchanged 32 million shares in return for 30% ownership by Barrick Gold Corporation in the Iceberg gold trend. The Pipeline, Cortez Hills and Goldrush trends have high grade and have produced a total of 46 million tons. The Iceberg and Avocado trends are exploration targets with grades similar to Santa Fe's gold trends. Santa Fe has approximately 53 million tons of ore with grades ranging from 9 to 87 g/t (grams per ton).

The principal reason Santa Fe Gold has been focusing its acquisition program in New Mexico and South Eastern Arizona is because it has much higher grades than almost anywhere in the USA. Some of the areas Santa Fe Gold is targeting are among the richest and highest mineralization of any region in the world. As a consequence, Santa Fe Gold's quality and quantity of grades are potentially superior to those of NuLegacy Gold, indicating greater value per ton in terms of grams, ounces and dollars and lower costs of production.

The table below illustrates the difference in grades between Santa Fe Gold and NuLegacy and numerous other similar companies with inferior grades. This potentially means Santa Fe Gold should be awarded a higher valuation and multiple, since it contains exponentially higher values per ton of ore and as a result, can be mined much more efficiently and profitably.

Figure 5: Difference in Gold Grades

NuLegacy Gold Trends			
Gold trend	**Ownership**	**Gold to date**	**Grade g/t**
Pipeline	Barrick	~ 21 million	2.2
Cortez Hills	Barrick	~ 15 million	4.1
Goldrush	Barrick	~ 10 million	10.1
Iceberg	NuLegacy	~ 90 - 110 million ton exploration target	0.9 to 1.1+
Avocado	NuLegacy	Just discovered	
Santa Fe Gold Trends			
Gold trend	**Ownership**	**Estimated gold**	**Grade g/t**
Values quoted in grams per ton	Conversion	1 oz Gold =	31.1 grs
Knight's Peak (Flotation)	Santa Fe	20 million tons	15
SW New Mexico (Flotation)	Santa Fe	20 million tons	13
Re-mining - Tailings (Flotation)	Santa Fe	1.2 million tons	41
High Grade deposit (Leach Operations)	Santa Fe	5 million tons	87
South Eastern AZ (Placer Operations)	Santa Fe	1 million tons	9
Hidalgo County Playa deposit (Placer Operations)	Santa Fe	5.9 million tons	11
Other Deposits under Acquisition	Santa Fe	5 million tons	43 – 312

Source: Cohen Grassroots Research and Company Material

Based on similarities alone and upon development of SFEG's assets, it is reasonable to assume that SFEG should trade at a similar value as NuLegacy. However, with Santa Fe Gold's edge in terms of Gold equivalent grades and values, in time, Santa Fe could trade at a premium to NuLegacy and other similar Gold companies. NuLegacy share prices spiked up after the discovery of the Avocado gold trend. We believe, with the continued exploration and acquisitions by SFEG's astute management team, the stock price of Santa Fe might continue to increase on a similar uptrend to that of NuLegacy, which based on comparable market valuations, would mean at least an equivalent move of approximately 5 (five) times upside from current levels for Santa Fe Gold and thereafter more as the Company's assets continue to increase. If SFEG is able to raise the estimated required cash and begin production, it could theoretically achieve a similar stock price multiplier from multiple ore sources and processing operations. At peak levels of $0.40 cents attained by NUGLF in late September, the equivalent share price could be about ten times (10x) upside from SFEG's current share price. While this is theory, it is possible.

About Santa Fe Gold

Santa Fe Gold (OTC SFEG) is a US based acquisition exploration and mining company with an emphasis on Gold, Silver and Copper. The firm holds assets in The Knight's Peak region of Grant County, New Mexico comprising the Malone Mines, Patanka, Hillcrest Barranca and Principal Mines incorporating some 20 mine sites at Knight's Peak and recently expanded its holdings surrounding these sites, almost quadrupling its original acquisition. All of its planned major properties are situated in locations that are considered politically stable.

The Company has also acquired significant holdings in the Playas Lake Bed Area of Hidalgo County. The asset size in the Playas Lake Bed is three times the size of the original recent Malone Mines sites acquisition. SFEG will be focusing on placer mining at the Playas Lake Bed as the lake has been the repository of multiple run-off streams from the Burro mountain range. The location of the mines is also easily accessible via I-10 headed west toward Tucson from Lordsburg. Initial findings suggest a concentration of Gold, Silver, Platinum, Palladium, Copper and other distinct rare metals including notably high percentages of Titanium ores in the Lake Bed area.

On October 19, 2016, new CEO Tom Laws "Issued an Update on its Acquisition of Malone, Patanka, Hillcrest, Barranca and Principal Mines incorporating some 20 Mine Sites. We excerpt sections from this press release.

ALBUQUERQUE, N.M., Oct. 19, 2016 (GLOBE NEWSWIRE) –

Tom Laws reviewed the Company's progress. "My specialty is the economic optimization of mining and production with over 40 years of experience in the mining business with some of the largest companies. Proficiency in minerology and metallurgy has enabled me to gain intimate knowledge of quality local precious metals deposits and known high grade assets. I have personal relationships with many landowners and mine holders who have confidence in our ability to take these projects forward. As a result, we are in a unique position to make acquisitions relatively economically and create immediate value for shareholders of Santa Fe Gold. Since becoming CEO of the company, management has developed a plan to rapidly transform Santa Fe Gold into a growing and viable operating company." We quote:

- Execution of that plan has been management's primary focus over the past few months. We are making significant headway and believe you will see more tangible evidence of our progress over the next few months.
- Improve the financial footing of Santa Fe. This will make it possible to complete necessary funding we are expecting, on favorable terms.
- These funds will be utilized to advance and expand all of our projects.
- Also important has been to bring the financial reports current.
- We expect to file the required remaining 2014 quarterly reports as well as the 2015 and 2016 annual and quarterly financial statements, bringing financials completely up to date and into full compliance.
- Upon regaining current status in our financial reporting, we plan to apply for resumption of quotation of the company's stock on the OTC Bulletin Board.
- Our longer term objective is to further ascend to a higher market and return to the NYSE AMEX market in time, as the company continues to grow and executes on its new strategy.
- Santa Fe Gold's new properties encompassing the Malone Mines actually comprise a group of some 20 mine sites:

- Acquisition of which includes contiguous areas that surround the main group of mines that have great potential. SFEG is using a strategy known as a “Roll-up”.
- Acquisition of mines and territory with the goal not just to acquire millions of ounces of gold for the future, but at the same time, build a veritable gold production powerhouse.
- This consolidation process combines multiple mines into something much larger, enabling economies of scale.
- Several leading junior miners have seized the initiative over the past year, taking advantage of recent temporarily low gold and silver prices and have increased their holdings by as much as 10 million ounces through strategic acquisitions and have received much praise and adoration from the market.
- Santa Fe Gold aspires not only to do the same, but has the ability and confidence to even exceed such levels in time.
- Merging fragmented mines into one contiguous land holding is also strategically important, especially in the case of the Malone Mines which are of exceptional historical significance, given that 80% of all the Gold discovered in New Mexico has come from this region.
- In addition to the already named mine sites of Malone Mines, Barranca, Hillcrest, Patanka, Prinicipal is a secondary Malone Mine along with more than a dozen other mines, including: The Fujiama or Malone No. 1, Vesuvius or the Malone No. 2, Malone No.3, Paracutin or Malone No. 4, The Barria, Los Ancienos, Codena De Plata, Santos Mineros, Barra Rosea, Argonaut, Saragosa, Katmai or Jalisco and Stromboli or Tip Tilt and also several additional surrounding and contiguous nearby mine sites.
- All of these mines within the Knight's Peak region and are estimated to hold some 15 million tons of high grade ore and higher grade gold veins that should provide ample feed for processing operations that could last some 25 years to three decades.
- We believe the area potentially contains immense in-ground resources and constitutes a very promising mining proposition.
- Historic mining has demonstrated the existence of substantially higher than average grades than first indicated in our initial release.
- Analysis of recently obtained data leads us to now believe these grades could be much higher with reports of exceptionally higher yielding seams.
- Historic documentation from reliable sources suggests numerous mines with veins containing from five to sixteen ounces of gold per ton as known to have been encountered and recorded.
- Historical data shows that in today's money, miners received the equivalent of $600 to $900 per ton and in certain instances two or three times that amount from various mines throughout the region. This confirms a very high rate of return, especially if mining costs can be kept to below $200 per ton, we anticipate will be achievable through optimization and scale mining with strict cost controls.
- With the recent run up in gold prices and brighter demand outlook, there is renewed interest in today’s mining markets.
- The acquisition of the Malone Mines, Patanka, Hillcrest, Barranca and Principal Mines and surrounding gold properties represents the first realization of our new strategic agenda.
- We have been successful in identifying other attractive precious metals properties with high quality resources and expect to announce those additional acquisitions soon.
- We have also concluded that even at prices well below today’s gold price, the Malone Mines project should support development of one or more very profitable new gold mines.
- We intend shortly to commission an independent engineering review and are confident it will support our conclusions.

- The Company already holds mineral rights to a very large area, estimated to contain some 15 Million tons of ore and with the recent quadrupling of holdings surrounding this area could now be considerably more.
- The geology of the region suggests superb upside potential for discovery of other major gold deposits. The areas under consideration are among the most highly mineralized anywhere in the world and this is further supported by the fact that some eighty percent (80%) of all the Gold discovered in New Mexico thus far has come from this region. The prospects of further major discoveries in these nearby areas surrounding the Malone Mines would appear to hold exceptional promise and potential, a large amount of which is now already under Santa Fe's control with other deposits being added or under negotiation.
- We are considering all options to more quickly advance all of these project to near term production.
- We believe the next several months will be an exciting time in the transformation of Santa Fe and want to thank you for your patience and support.
- The Company will be generating revenues from exploring and mining its holdings. In the long term, the Company will create additional revenue streams through further exploration and development of projects.

Figure 6: SWOT Analysis of SFEG

Source: Cohen Grassroots Research

The Company's management team has the expertise to pursue a 'rollup' strategy involving the merger of fragmented mines into one contiguous land holding. The strategy is especially important in the case of Malone mines since 80% of the Gold discovered in New Mexico has come from this region. In addition, other mines such as Barranca, Hillcrest, Patanka, Prinicipal, The Fujiama or Malone No. 1, Vesuvius or the Malone No. 2, Malone No.3, Paracutin or Malone No. 4, The Barria, Los Ancienos, Codena De Plata, Santos Mineros, Barra Rosea, Argonaut, Saragosa, Katmai or Jalisco and Stromboli or Tip Tilt located within Knight's Peak region are together estimated to hold approximately 15 million tons of high grade ore. Acquisition of such a contiguous piece would enable the Company to continue processing operations for the next 25 - 30 years. Through the analysis of historical data, the Company has estimated that miners have received the equivalent of dollars $600 - $900 per ton. It is possible for some ore to receive 3 times this amount. These potential rates can create high rates of return especially if the Company is able to keep mining costs to below $200 per ton.

Figure 7: Key Milestones for the Company

Start Date	Milestone	End Date
10/16/2000	Acquisition of Playas Hidalgo	10/31/2016
10/20/2016	Acquisition of Malone Area Expansion	11/30/2016
10/20/2016	Acquisition of Diamond Mine	11/30/2016
10/20/2016	Negotiate Milling Capacity	11/30/2016
10/20/2016	Samples to Potential Ore Buyers	10/30/2016
10/20/2016	Negotiate for Additional Mill	11/30/2016
10/20/2016	Complete Audit	12/20/2016
10/20/2016	File documents with SEC	12/20/2016
10/20/2016	Secure Funding Source	10/30/2016
10/25/2016	Ratify BOD Decisions	10/25/2016

Source: Cohen Grassroots Research and Company Material

Figure 8: Santa Fe Asset Valuation of current operations

	Estimated Tonnage	Tons per Day Extracting	Mine Life (Years)	Tons per Day Ore	Estimated Ore Grade (OPT Au)	Estimated Daily AU Production	Estimated Price per Ounce	Estimated Annual $ Value of Production	Estimated Mine $ Value
Flotation									
Load Mining									
Knight's Peak	20,000,000	1,500	36.53	400	0.20	80	1,100	26,400,000	771,506,849
SW New Mexico Claims	20,000,000	1,500	36.53	400	0.20	80	1,100	26,400,000	771,506,849
Re-mining - Tailings	1,200,000	200	16.44	200	1.40	280	1,100	92,400,000	1,215,123,288
Leach Operations									
SW New Mexico - High Grade	5,000,000	10	1,369.86	10	3.00	30	1,100	9,900,000	10,849,315,068
Placer Operations									
South Eastern AZ	1,000,000	50	54.79	50	0.10	5	1,100	1,650,000	72,328,767
Hidalgo County Playa Deposit	5,900,000	50	323.29	50	0.10	5	1,100	1,650,000	426,739,726
TOTAL	**53,100,000**	**3,310**		**1,110**		**480**		**158,400,000**	**14,106,520,547**

Source: Company Material

Figure 9: Surveying the location of the mine

Source: Company Material

Figure 10: Location and pathway to SFEG mines

Source: Company Material

HISTORY OF SANTA FE GOLD

The Company started its business as Azco Mining, Inc. in 1988. It initially focused on developing and acquiring metal copper and industrial minerals assets as a developer in Arizona. In 2004, Santa Fe changed business model and focused on exploring and acquiring properties for precious metals. In 2006 the Company acquired the Summit silver-gold project located near Duncan, Arizona through its acquisition of Lordsburg Mining Company.

Santa Fe also acquired a mill site in Lordsburg, New Mexico. After raising sufficient capital, the Company commercialized its Summit Project, upgraded the mill site to state of the art and acquired the Oritz Gold project.

After its acquisition of the Summit Mines, the Company planned to apply its extensive industry knowledge and invest significant capital to expand production from the Summit mine. Plans to increase ore processing capacity were also put into place. Cash flows from the production from Summit mine and Lordsburg mill would be driven towards developing the Company's other properties such as the Mogollon and Ortiz projects. Santa Fe intended to develop a strong portfolio of assets. Partial returns from the Summit mines were to be invested in acquisitions.

Figure 11: Timeline of Company's Development

1998 - 2004 Santa Fe founded as AzcoMining, Inc.

1998 - 2004 Acquired Black Canyon mica project

1998 - 2004 Leased micaceous iron oxide (MIO) deposit (the Planet) in Arizona

2004 - 2006 Under CEO Pierce Carson, beginning in 2004 the Company refocused efforts to precious metals

2004 - 2006 Acquired exclusive rights to 90 sq. mi. of Ortiz Mine Grant (gold project)

2006 - 2008 Acquired Summit Mine silver-gold project

2006 - 2008 Acquired a mill site in Lordsburg and an existing mill in Winston, New Mexico

2006 - 2008 Raised $13.5 mn through senior secured convertible debentures

2008 - 2010 Started construction on Summit Mine

2008 - 2010 Entered into a definitive gold sale agreement

2008 - 2010 Entered into definitive agreements to purchase $2 mn of securities in a registered direct offering.

2010 - 2011 Started production on Summit Mine

2010 - 2011 Signed MOU for acquisition of Columbus Silver Corporation

2010 - 2011 Raised $5 mn senior secured loan from Victory Park Capital

Nov 2013 The Company suspended all mining operations and placed the mine and mill on a care and maintenance program

Mar 2015 The Company was in default on payments totaling approximately $16.1 million

Aug 2015 SFEG filed voluntary petitions under Chapter 11 of the Bankruptcy Code in U.S. Bankruptcy Court for the District of Delaware

May 2016 Board of Directors terminate Jakes Jordaan's employment as President & CEO and appoint Erich Hofer, Santa Fe's Chairman, as Interim CEO

Jun 2016 Santa Fe Gold emerges from the Voluntary Petition Under Chapter 11 of the Bankruptcy Code

Jul 2016 SFEG updates Company financials

Aug 2016 SFEG announces Mr. Tomas Laws as CEO of the company

Sep 2016 Santa Fe Gold Corp Announces The Engagement of MaloneBailey, LLP as Accountant and Auditor

Sep 2016 Santa Fe Gold Corporation announces additional plans as part of its renewal of production and processing operations

Source: Cohen Grassroots Research

Production operations began in 2010-12 and were focused on selling precious metals and flux material. Regrettably, previous management when offered an additional $10 Million and possibly more on an over-subscribed offering, elected to turn it down, believing they had enough funding to see the Company through to full output. This mistake will not be repeated. New management intends to adequately capitalize Santa Fe. In addition the Company intends to outsource all production to professional mining contractors on beneficial terms that will be highly incentivized so that mining production objectives are not only met, but continually exceeded. Santa Fe's new CEO has overseen many multi-thousand ton per day operations and is confident of success.

As a direct result of not utilizing contract mining, numerous breakdowns and other production interruptions, by November 2013, the Company was unable to continue operations and placed its properties on a care and maintenance program. For 3 months ending March 2015, the Company had not engaged in any mining activities. For nine months ending March 2015, the Company had incurred losses of more than $4 million, had a total accumulated deficit of $90.6 million and a working capital deficit of $29.2 million. The Company also defaulted on payments totaling approximately $9.3 million under a Senior Secured Gold Stream Credit Agreement (the "Credit Agreement") with Waterton Global Value, L.P. and approximately $6.8 million under a gold stream agreement (the "Gold Stream Agreement") with Sandstorm Gold Ltd. on March 31, 2015. The warning signs regarding the Company's precarious situation were already highlighted in the 10-K report Risk Factors – "*In the event that we are unable to raise additional capital to satisfy the terms and conditions of the negotiated restructuring of our senior secured indebtedness, we may be forced to seek reorganization or liquidation under the U.S. Bankruptcy Code*".

In August 2015, the Company and its three subsidiaries filed voluntary petitions under Chapter 11 of the Bankruptcy Code in U.S. Bankruptcy Court for the District of Delaware and declared bankruptcy. The Company continued to manage its business as debtors in possession as per the applicable provisions of the Bankruptcy Code and by the orders of the Bankruptcy Court for the District of Delaware. As per the rules, the principal and accrued interest due to creditors were immediately due and payable. However, the efforts to enforce the Company to pay stayed as per the commencement of Chapter 11 Cases.

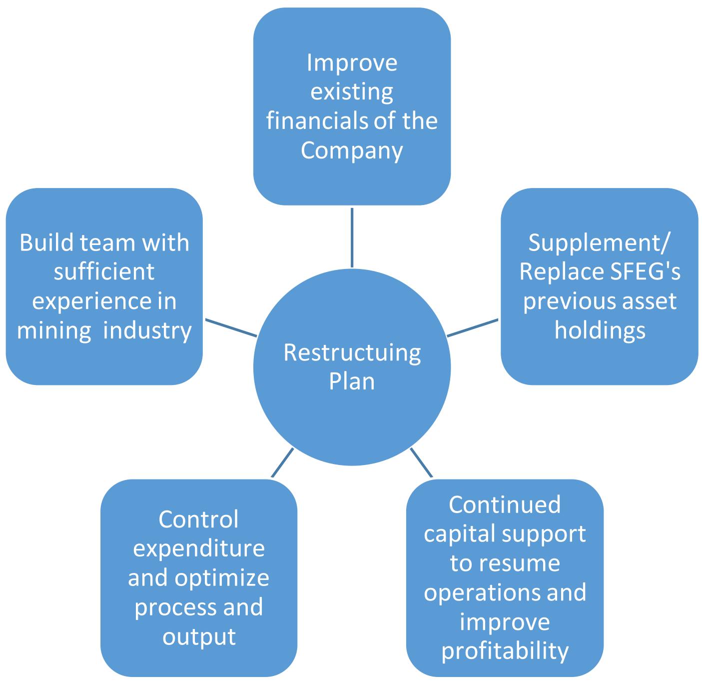
Declaring bankruptcy resulted in a major setback to the Company's plans of becoming a strong player in the precious metals mining industry. The Board of Directors convened in May 2016 and terminated the employment of CEO Jake Jordan from the post of CEO and President. The Board also convened to appoint Erich Hofer as Santa Fe's interim CEO. In June 2016, Santa Fe Gold took a step forward. It successfully emerged from the voluntary petitions under Chapter 11 of the Bankruptcy Code in the US Bankruptcy Court for the District of Delaware. After the dismissal from bankruptcy, the 'Q' from the Company's interim trading symbol – SFEGQ, was removed. Santa Fe has since been trading under the symbol of 'SFEG'. The Company still intends to become a major player in the precious metals mining industry. New management realized the first step to re-gaining credibility among investors is to declare their financials and wait for an audit. The Company is currently in the process of bringing its filing requirements up-to-date with their financial update.

In August 2016, The Company appointed Mr. Tomas Laws as the new CEO of the Company. Mr. Laws has over 40 years of experience in the mining industry. After his announcement as CEO, Mr. Laws has been crucial to the strategic new direction of the Company. SFEG had two major plans that were brought to fruition in the month of September 2016. The Company announced the engagement of Malone Bailey, LLP as the Company's new auditors and it began a series new acquisitions. Malone Bailey is a nationally recognized auditing for micro and small cap companies that include over 700 clients. It is a tiffany hire. Its new acquisitions of the historic Malone, Patanka, Hillcrest, Barranca and Principal Mines incorporating some 20 Mine Sites should give strong credence that the Company's profitable business model is to become a strong player in the precious metals mining industry.

SFEG's prior management failed to control costs against excellent assets when it was forced into bankruptcy in August, 2015. The Company's problem was not the quality of its assets. It was, rather, controlling expenses, cash flow and capital to create a profitable cash rich mining company. It is unique that when SFEG came out of bankruptcy, it awarded its current shareholders 100% of their share value. Most bankruptcies deplete shareholder ownership. Thus, the current shareholder base has retained many long term shareholders, a decided corporate asset. Some shareholders purchased additional SFEG common stock at very favorable prices, betting that the Company would emerge out of bankruptcy to once again be successful. The shareholder's base of SFEG is a solid long term foundation as is the value of its NOL (non-operating loss) of close to $90 million dollars.

While the Company currently has 139.59 million SFEG shares outstanding. We believe SFEG will have to issue additional shares in exchange for capital investment cash appropriated for certain reported and current asset acquisitions. The $80+ million dollar NOL makes the current capital and share structure of SFEG quite valuable.

Figure 12: Restructuring plan for Santa Fe Gold



Source: Cohen Grassroots Research

SFEG has already made considerable progress in implementing its restructuring plan. The Company has appointed Mr. Tom Laws who brings his invaluable experience from working with Phelps Dodge and some of the world's largest mining companies including advising large mining firms. The new CEO and Board member also adds to the knowledge of Company's existing properties. Mr. Laws will further drive SFEG's acquisitions program.

Since its emergence from bankruptcy, management has moved quickly to get the Company back on its feet. The Company has been able to write down more than 90% of its existing debt. This has given the Company a new lease of life, enabling it to seek new capital without investors having to worry about their funds being used to write down debts. The Company had the option to continue developing its previously held assets or replace them with more compelling and profitable assets with greater reserves. Management has made the decision to rebuild Santa Fe's assets portfolio with new properties with substantially higher tonnages, significantly higher grades with greater value and higher profit potential. The Company already controls 53 million tons and is targeting multiple times previous tonnages held by the pre-bankrupt Santa Fe, such as Summit Mine of about 968,000 tons.

Santa Fe's new management has been aggressive acquiring properties with high potential. Mr. Laws has over forty years of experience in the mining industry. He has extensive knowledge of properties and has access to exceptional properties which has made it easier for the Company to build its portfolio. The Company is also intends to ramp up to full production at 1,000 to 1,200 tons per month, initially generating strong revenues. Ancillary mining should also help augment revenues as additional properties are brought on stream.

In order to escape from the slow production cycle that plagues the majority of the mining companies, the Company intends to substantially upgrade mill capacity and employ professional mining contractors to ensure maximum efficiency. The Company's control of about 53 million tons of high-grade ore in areas, has proven to hold millions of ounces of extractable gold, silver and platinum ore. The Company has access to millions of tons available for near immediate mining and has developed plans to mine these rich, high-grade minerals.

UNDERSTANDING GOLD MINING

It is important for our readers to understand the basic terminology of gold mining. Before the process of gold extraction begins, a claim needs to be made on the natural resource. Any citizen, corporation or a non-citizen who has declared their intention to become a citizen of the United States can locate a mining claim. A mining claim can be located on federal lands and should be open to mineral location. A claimant who can verify the claim is open to mineral entry by checking with the BLM State Office Information Access Center (Public Room) who has access to master title plats, records, files and other required information.

Figure 13: Understanding types of mining sites

Lode
- Vein, ledge, or rock between definite walls
- Located by metes and bounds
- Max length is 1,500 feet by 600 feet

Placer
- Deposit other than lode
- Contains free gold and other minerals
- Corporation is a single locator
- Individual can locate 20 acres with max 160 contiguous acres with 8 or more people

Tunnel Site
- Tunnel run to develop a vein or lode
- Used for further discovery
- Two stakes placed up to 3,000 feet apart
- More a right -a- way than mining claim

Mill Site
- Non- mineral sites
- Located in connection with placer or lode claims or are independent
- Upto 5 acres in size

Source: Cohen Grassroots Research

In order to record a mining claim, a location notice needs to be filed with the BLM and local county recording office with details such as date of location of claim, description of discovery monument, the name of the claim, legal description and name, and addresses of all locators. Separate notices must be filed for lodes, placers and mill sites.

Mining operations can vary in the scale of their operations as well the technical sophistication required to mine a claim. Multinationals engage in what can be dubbed as formal, large-scale mining whereas small firms engage in artisanal and small-scale mining. Mining has become a very capital intensive business that requires high mechanization and expertise to provide sufficient returns. Costs involved in mining include metallurgical, infrastructural and operation factors.

As an investment product, the price of gold is a major consideration for investors. Different countries use different scales to measure the value of gold. The below table uses a standard measurement for international Gold markets.

Troy ounce is generally used to measure precious metals and gemstones, such as gold. 1 troy ounce is equal to 31.1034768 grams. The table below provides an insight into how the quality of gold affects the price per gram.

Figure 14: How the quality of gold affects the price per gram

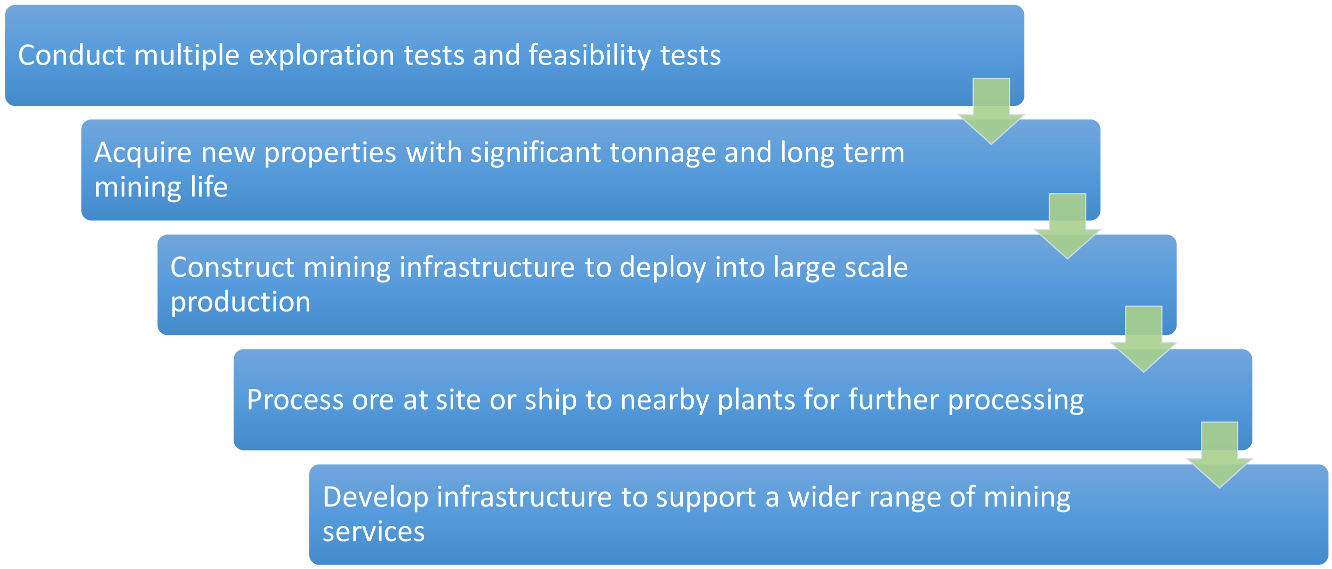
Grams	Carat	% of Gold	% of other metal	Price per gram	Total Price
31.1	**24K**	100%	0%	40.47	1258.617
28.612	**22K**	92%	8%	37.15	1062.9358
23.325	**18K**	75%	25%	30.35	707.91375
18.038	**14K**	58%	42%	23.68	427.13984
13.062	**10K**	42%	58%	16.88	220.48656

Source: Cohen Grassroots Research

COMPANY BUSINESS MODEL

The Company has a simple and a scalable business model that can be applied to any asset it acquires. The simplicity of the model provides management the ability to ramp up quickly and generate revenues while benefitting from economies of scale. This also allows the Company to build a sustainable flow of cash without having to depend on new capital injections at every phase.

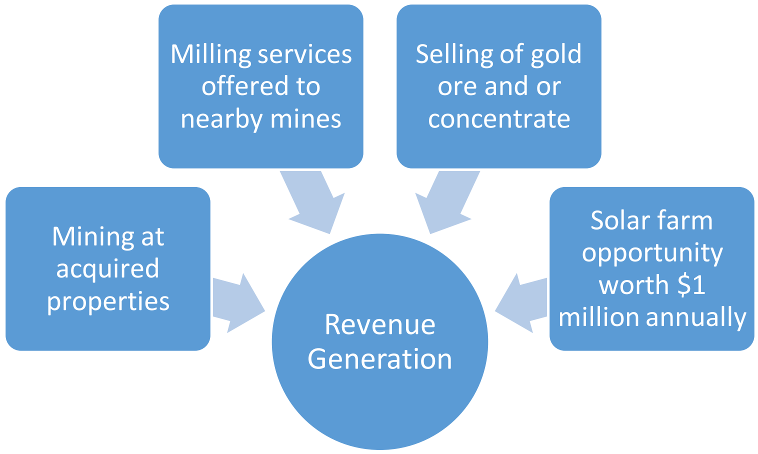
Figure 15: Santa Fe's business model



Source: Cohen Grassroots Research

Currently the Company has multiple ways to generate revenues in the short term. It has a 'one – off' opportunity to sell off concentrate to other mining companies and also has a solar farm opportunity valued at $1 million annually. In the long run, the Company will be focused on offering ancillary services including milling. Its main source of income will continue to be mining and selling product.

Figure 16: Revenue generation at SFEG



Source: Cohen Grassroots Research

OPERATING PLAN

Santa Fe is opening up the enormous production potential of numerous high-grade ore deposits in south-western New Mexico and south-eastern Arizona through its unique and proprietary knowledge of these coveted assets. Management understands the importance of plant acquisitions and their ability to service the ore types available in these deposits. Ore will be processed from within a 100-mile radius of each plant site. The primary focus is on minimizing operating costs of processing multiple types of complex ores through the performance of multiple activities such as milling, concentrating Leach and Soak activities, as well as placer sluicing.

Maximum profitability will be possible when a combination of complex, oxide and sulphide ores are processed at the plants. However, plant construction, permitting and availability of water will be the initial constraints. The Company has identified Lordsburg mill, a previous Santa Fe property as its first step in initializing production. The Lordsburg mill is currently owned by a financial institution but is not operational. Once the mill and associated water and land rights are available, the prep required to handle complex and oxide orders will commence immediately and production can be anticipated to start within 90-120 days.

Figure 17: Company's Operating Plan

	Scenario 1	Scenario 2	Scenario 3
Investment required	$20 million	$10 million	$5 million
Purchase and operations	Purchase Lordsburg and Deming Mills and start leach/soak and sluice operations quickly	Purchase Deming Mills and start leach/soak and sluice operations quickly	Start leach/soak and sluice operations quickly
Commencement of operations	Within 90 days handling tailing as the feedstock Mining permitting and start-up will commence at the earliest by start of year 2 Leach/soak and Sluice operations to commence in year 2	Within 90 days handling tailing as the feedstock Mining permitting and start-up will commence at the earliest by start of year 2 Leach/soak and Sluice operations to commence in year 2	Within 90 days handling tailing as the feedstock Mining permitting and start-up will commence at the earliest by start of year 2 Leach/soak and Sluice operations to commence in year 2
Expected Cash flow	$230 million over six years at current gold prices of $1,200 per oz, $17 Silver, $950 Platinum, $630 Palladium and $2 Copper	$217 million over six years	$181 million over six years
Benefits	Minimize operating costs, maximize cash flow	Lower necessary investments since Lordsburg mill is taken on lease rather than purchased	Minimize necessary investment since Lordsburg mill is taken on lease and acquisition of the Deming mill is omitted
Repayment	Through debt refinancing and joint venture partnership Debt will be collateralized through assets and common stock issued to financier Joint venture will own the assets and JV financer issued common shares		

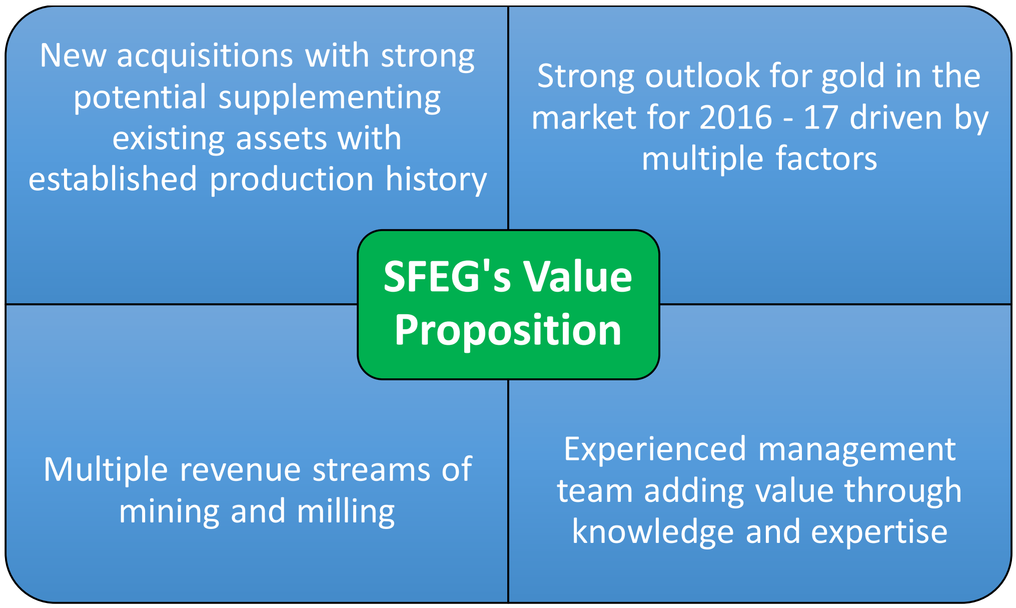
Source: Cohen Grassroots Research- we have not forecasted $15 million in this exhibit which is intended to be a macro-summary of invested cash.

The mining industry presents a multitude of problems that can be resolved with the right mix of human resources. The Company will implement a personnel plan for approximately 40 employees who will be responsible for the operation and maintenance of the facilities. Five (5) employees with the required experience and expertise, out of the 40, are to be dedicated to locate, claim and assess highly profitable ore bodies. The management team will be 4 employees.

Management is also exploring the opportunity of selling to processors previously severed materials worldwide that are under Santa Fe's control. This will generate immediate cash flow that can be used to minimize the initial investment needs of the company. Selling previously severed materials would require a start-up cost of about $1 million. However developing opportunities could result in the acquisition of extremely valuable assets near term.

VALUE PROPOSITION

Figure 18: SFEG Value Proposition



Source: Cohen Grassroots Research

COMPANY ASSET DESCRIPTION

A rapid scale up to full product acquisition and product should enable the Company to employ economies of scale and keep costs to a minimum. The plan involves 4 key opportunities listed below.

Figure 19: Santa Fe's existing assets

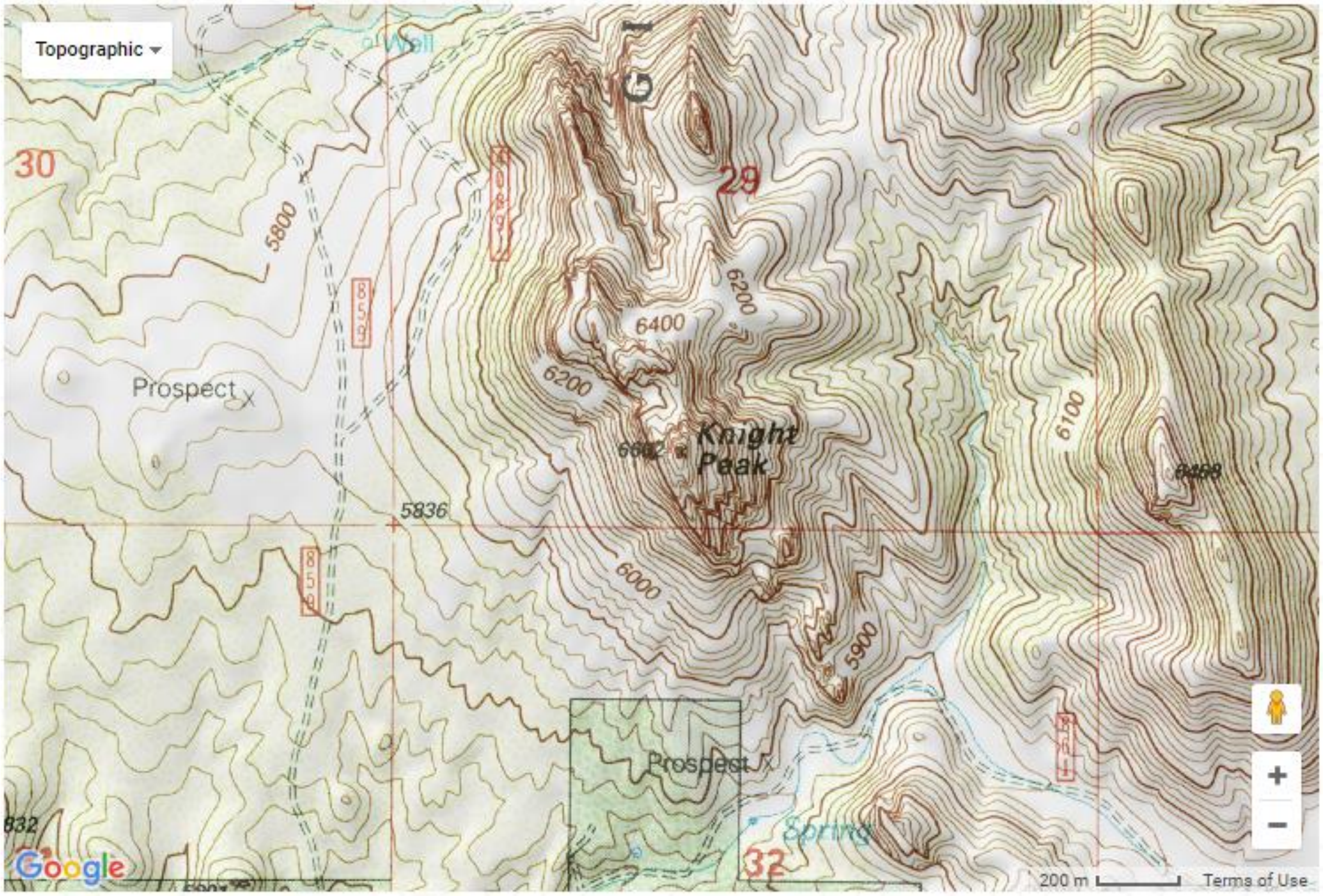
Source: Cohen Grassroots Research

As per the US Geologic bulletin # 83, the lode mining claims at Knight's Peak in Burros have historically had strong producers. The property is unfettered. No additional exploitation has occurred since earlier time periods when even simple mining produced excellent yields. Exploration at a depth of 100 feet has shown precious metals at most levels and seven claims on the property contain five major veins of primarily gold ore. Core drilling and sampling are expected to confirm the initial findings from the limited published material.

The expectation from this property is worth about 400 tons per day. Average grades are at 0.4 ounces per ton Gold equivalent with approximately AU, 40 oz. per day Ag and over 160 oz. Au on a daily basis. $185,000 revenues.

Production on the claim is expected to begin in the forthcoming months.

Figure 20: Topographical map of Knight's Peak, Burro, New Mexico



Source: Google Maps and www.topozone.com

In addition to extraction, the Company also intends to generate revenue through the milling process. As soon as milling capacity is available, local producers are expected to make high-grade ore available and save on transportation costs. While initial ore processing will employ Hydrochloric Soaking, new ore processing capacity will be employed for complex ores. The Company's milling site will offer local producers the best available process depending on the complexity of the ore.

SFEG has also reached an agreement with the local government for the access to and control of up to 1,200,000 tons of tailings. However, the assay work for these tailings needs to be updated. Based on multiple core drilling and tests, and nearby high-grade opportunities in the nearby locations, estimates of over 1,000,000 tons of silver and numerous other precious metals are expected. The tailings opportunity is expected to produce 200 ton per day of an average of 1.4 ounces Au and 1.4 ounces Pt per day

The Company's plans to set up a mega processing facility and mill will be augmented by management's plan to dedicate one ball mill to crushing for feed for a soaking and agitation facility. The soaking and agitation facility will be used to process complex materials with three different methods available to process solutions through a hydrochloric soak.

There are two types of readily available feed sources in the district including clay deposits and slag deposits in the nearby locations. Clay deposits treated using soak and agitation method have provided gold production on an average of 3.0 ounces per ton. While these numbers are a result of deposits on the surface, further analysis through core drilling and sampling is required to verify the current estimated tonnage of 1 million to 2 million tons of ore. Production from these locally sourced deposits will begin after the plant is finalized. Management has provided an estimate of three months to start production.

New Company management has created short term and long-term plans for continued profitability. They have identified nearby high yield ore bodies available for acquisition with an additional 20 million tons of ore. The closest property has up to 4 million tons of high-grade copper, silver and gold surface based ore which can be processed at the new state of the art processing facility and can be shipped to local smelters. A direct shipping line of Silica flux is easily available nearby for use by large smelters. The Company could also joint venture with a large mining entity to extract ore in a region that is expected to have more than a billion ton of porphyry copper deposit. The region could also contain large amounts of gold ore. Revenues from this venture could yield billions of dollars in anticipated revenues.

The Company also has a solar farm opportunity that could pay $1 million annually in repayment. SFEG is likely to use this sum to return some investments to shareholders in the form of dividends. As part of its plan to revamp the Company's asset base, SFEG is in negotiations to take control of unsold concentrate at a high processing mill. This concentrate will be sold to loyal SFEG customers with reliable smelters, high recovery percentages, and timely payments. The Company expects substantial revenue from this sale.

Figure 21: Satellite Map of Area nearby Playas Lake Bed

Source: Google Maps

Figure 22: Utilization of assumed $10 million of capital injection

First tranche - $2 million

- Tie up processing mill
- Commence acquisition of newer sources of high grade ore

Second tranche - $2 million

- Acquire processing mills
- Upgrade capacity to 2,500 tons

Third tranche - $2 million

- Complete additional down payments on acquisitions, permits, legal, operating fees and tariffs
- Initiate a mining claim staking program
- Develop contractual relations with ore sources owners

Fourth tranche - $2 million

- Upgrade mills through refits
- Design and get permit for tailings impoud, soak plant and placer handling

Fifth tranche - $2 million

- Complete all permits necessary
- Continue assessment work on feed materials

Contingency funding - $2 million

- Use for lease options,
- Test and complete Soak plant and sluice plant
- Prepare new impoundment for new mill tailings

Source: Cohen Grassroots Research

Figure 23: SFEG Assets

Source: Company Material

GOLD MINING ROADMAP

There is a logical sequence to gold mining processes for extracting ore from the earth's crust. Currently, approximately 60%-70% of the world's gold production comes from surface mines and the remaining from underground mines. The amount of gold contained in an ore body is described as its "grade" and is commonly quoted in grams per ton. For a deposit with a grade of 3 grams/ton, over 10 tons of ore would need to be extracted in order to produce a single ounce of pure gold (31.1 grams). This demonstrates the huge scale mining operates at in order to extract gold.

Figure 24: The Mining Process

Source: Cohen Grassroots Research

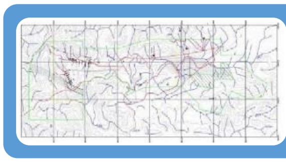
Exploration

Exploring for gold is a complex process that requires significant time, financial resources and expertise. Only approximately 10% of global gold deposits contain sufficient gold to mine. Gold exploration consists of the following steps:

Figure 25: Steps in exploration of a gold mining site

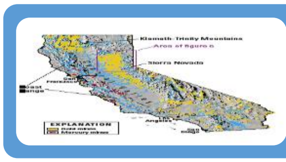
Literature Survey

- Collect available literature to target further probing



Geological mapping

- Use landsat and aerial photographs to create a geological map of interest area

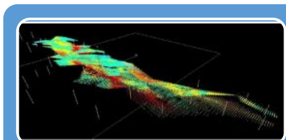


Identification Of Gold Bearing Zones

- Collect rock chip samples for gold mineralization, use geochemical methods such as stream sampling, or geophysical method to locate magnetic bodies below soil

Three Dimension Sampling

- Use drilling to determine the shape and size of formations, presence of veins and estimate tonnage



Estimates Of Resource

- An estimate for a resource is calculated based on length, width and depth and grade.

Source: Cohen Grassroots Research

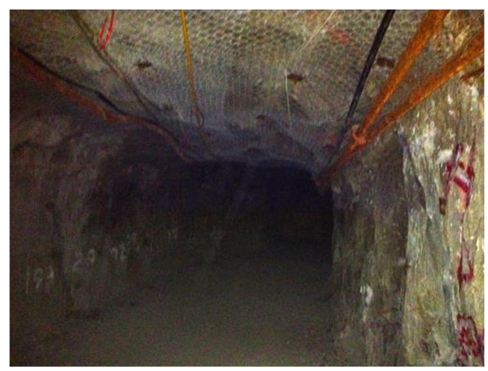
Development

The developmental stage involves planning and construction of the mining project. Mining companies must obtain appropriate permits and licenses before they can begin construction. This will generally take several years, although this can vary depending on factors such as location, regulatory requirements and ore processing needs. Construction may not be confined to the mine itself. Frequently, mining companies construct local infrastructure and amenities to support both logistical and operational needs as well as employee and community welfare.

Operation

Once development is complete, the mining project will begin operation extracting metal-rich ore from the deposit.

Figure 23: Types of mining

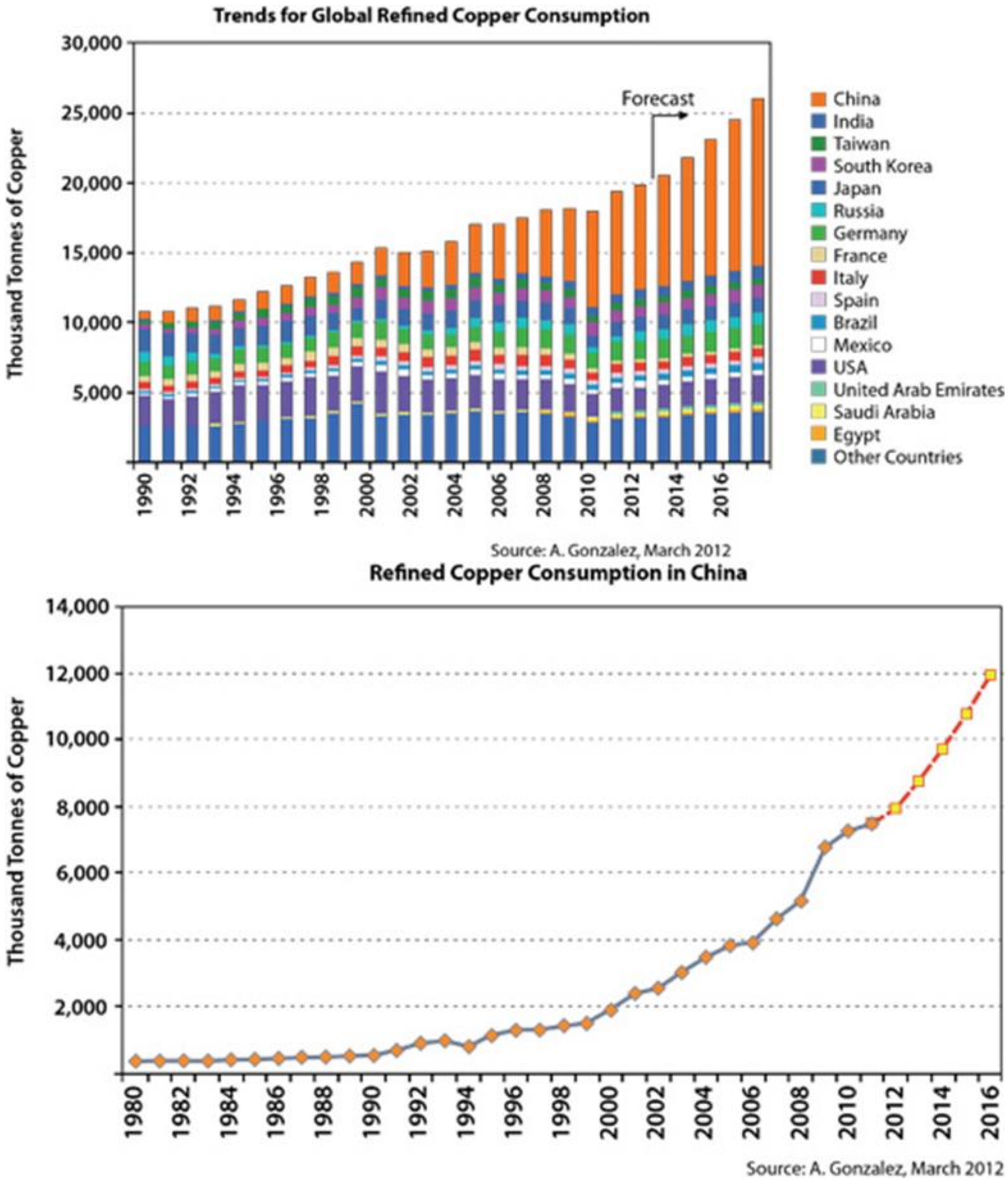


Surface mining delve into rock to extract minerals close to surface
Underground mining uses techniques to extract mineral from within the earth

Source: Cohen Grassroots Research from materials sent to us from the Company

Ore that has been extracted will require further processing at a refinery to recover the gold (as well as other valuable minerals). Mining companies use stringent controls to ensure high standards of health and safety as well as minimising environmental impacts.

Figure 26: Trends for Global and Chinese Copper Consumption



Source: A. Gonzalez, March 2012

The world is running out of Porphyry sized copper reserves. Existing mines operating for 20 or 30 years are already nearing the end of their productive lives as grades diminish and they become uneconomical. In actuality, as can be seen from the charts below, declining grades are really the biggest problem facing the industry. As the charts below show demand is rising, the replacement of the existing grid in favour of more efficient electrical transmission infrastructure argues for copper. This includes needed protection from electromagnetic pulse vulnerability and solar disruption.

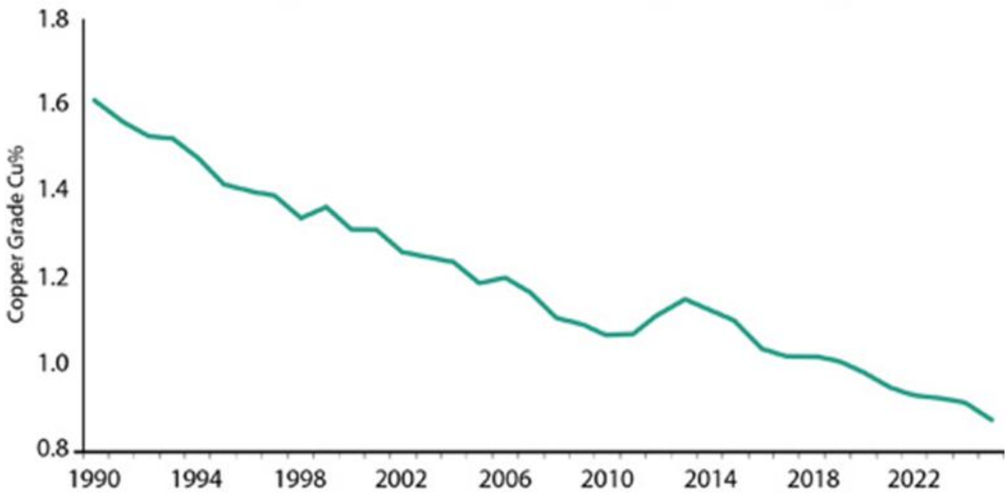
On November 1, 2016, Santa Fe Gold announced the acquisition of significant holdings in the Playas Lake Bed Region of Hidalgo County, New Mexico with high potential for Gold, Silver, Copper, Platinum and Palladium along with other Industrial Metals including Rare Earths and high percentage indications of Ferro Titanium, Titanium Ore and other Titanium Derivatives. Titanium is used extensively in Aerospace manufacturing and numerous other high technology applications. On the same day, BHP announced that it is excited by the prospects for Copper, particularly in light of its increasing usage in Electric Vehicles that use up to 40% copper in each unit.

Since the pre announcement lows of October 24, 2016, Copper has soared almost 30% in one of its fastest increases ever because of dwindling copper supply against massive new growth. Over the next 25 years as many as 40 million new Electric Vehicles will suddenly put Copper in the spotlight, a metal that often leads to higher metals prices. We have seen this happen with Palladium hitting new yearly highs, another important leading indicator for metals.

Figure 27: The Bingham Mine in Utah – One of the largest Gold, Silver and Copper producing mines in the continental US

Source: Company Material supplied to Cohen Grassroots Research for publication

Figure 28: Industry Grade Trends – Weighted Paid Copper



Source: Brook Hunt

Declining Grades, Not Enough New Mines

The key factors affecting production of new copper are declining grades (with fewer high grade discoveries), and not enough new mine production to meet demand going into and beyond the next decade

The chart below provides a graphic view of the decline in world average copper grades since 1985, plus the declining grade forecasts based even on new mines under construction or nearing completion.

The grade declines have been particularly acute in Chile, which produces about 38% of the world's mined copper. For example at Escondida, the world's largest copper mine and producer of 9.5% of the world's global copper supply, average copper content of mined ore has fallen from 1.72% in 2007 to 0.97% at the end of 2011, a decrease of nearly 43% in four years. Declining grades are a real future problem.

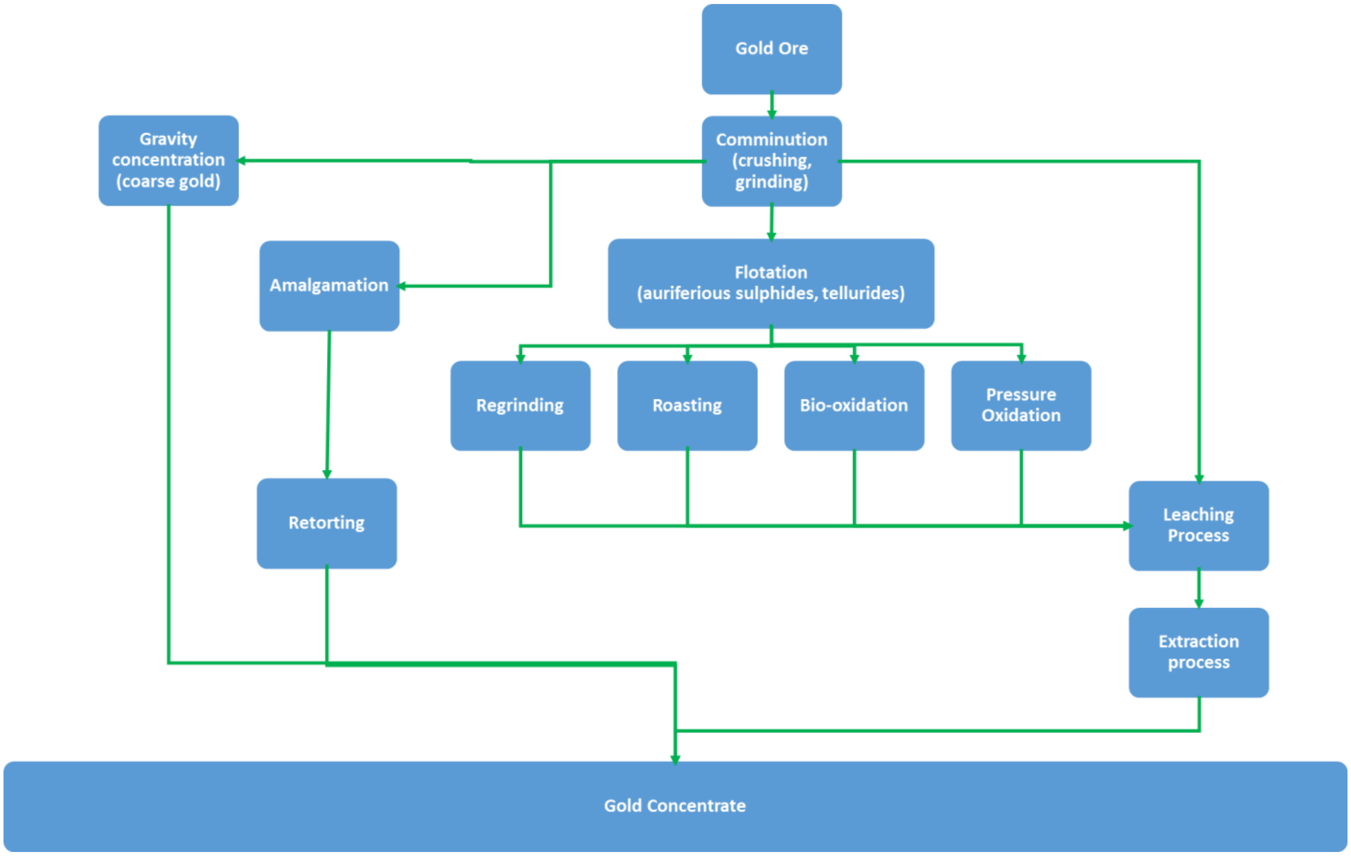
There are simply fewer high grade copper deposits being discovered. Presently about 60% of global copper mine production comes from massive, low grade porphyry open pit deposits. Despite lower grades, these operations provide economies of scale and can operate profitably at today's copper prices. But while new production is expected over the next years, the lower grades mean that overall production could fall far short.

BHP and Rio Tinto have both staked massive claims nearby the Playas Lake Bed Area. They are also not far from Santa Fe's Malone Mine Complex another important consideration surrounding Santa Fe Gold's new acquisitions.

Australia's Colossal Super Pit

The Kalgoorlie Super Pit was the brainchild of renowned gold miner Alan Bond. In the 1980s, Bond was busy buying all the minor leases on The Golden Mile, original site of Paddy Hannan's discovery in 1893. Bond believed the best way to mine the gold was to combine all of the struggling little mines into one massive producing mine: hence the Kalgoorlie Consolidated Gold Mines. Once the ore has been extracted, further processing is needed to separate the gold from rock including any other high-value minerals. A flow chart takes the reader through the various stages of gold and silver ore processing. Something similar that might be possible for Santa Fe Gold to achieve with its Malone 20 Mine Sites Mining Complex.

Figure 29 Flowchart for gold recovery from Ore



Source: National University of Singapore presentation

There are a number of methods to do this such as milling and smelting. The method used will depend on the grade and type of ore involved. After the processing stage, any metal recovered will be formed into unrefined bars known as “doré”. These unrefined bars will not only contain gold but other metals such as silver or copper which have been extracted. The percentages of each metal can vary between bars, although gold will generally account for 60-90% of the bar. These will then be sent to a refinery to separate each pure metal.

Figure 30: Creating 'Dore' bars

The gold concentrate is sent to a furnace where it is melted at 1250 degree Celsius and poured into moulds to create dore bars. These dore bars can weigh up to 25 kgs. They are sent to a refinery for further purification

Source: Cohen Grassroots Research

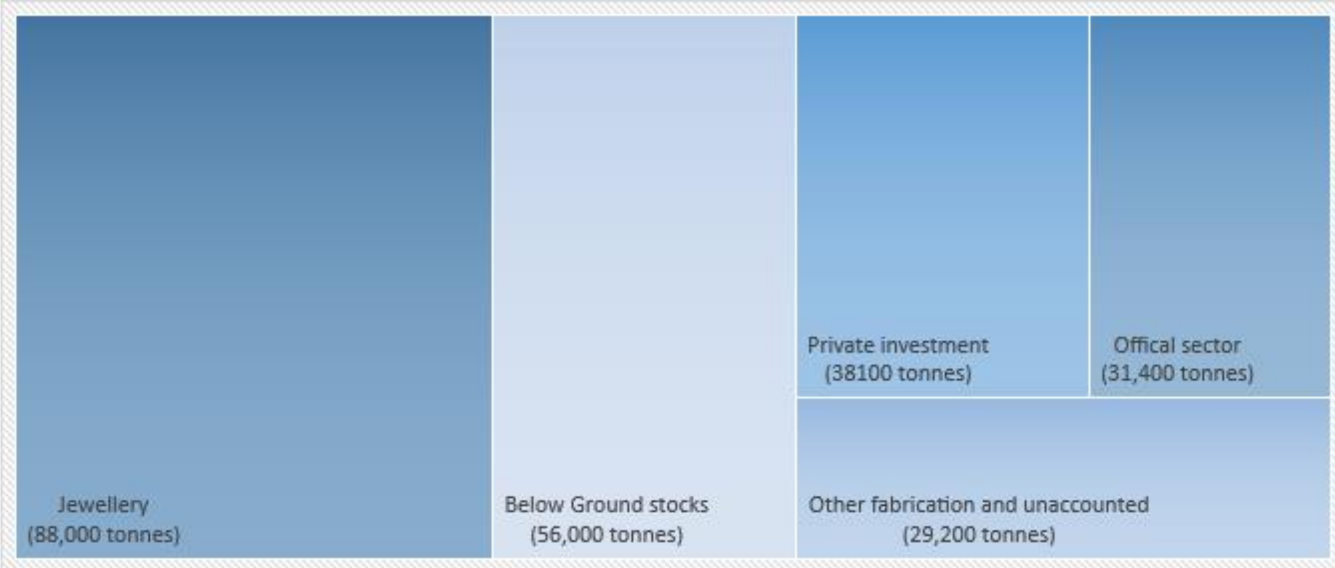
Decommissioning and Post-closure

After a mine has ceased operations, possibly because the ore body is exhausted or the remaining deposit becomes unprofitable (uneconomic) to mine, work then focuses on its decommissioning and rehabilitation. The closure of a mine is a complex undertaking. A mining company will also be required to monitor the mine site long after the mine site has been closed in order to ensure that the rehabilitation of the land is successful.

Given the scale of operations involved, any changes to mine plans in response to changes in external factors take time, such as the price of gold or inputs such as oil. These factors may affect which areas of an ore body are profitable (economic) to mine. In times of higher prices, mining low-grade ore (“low-grading”) will become profitable as the higher gold price will offset the increased cost of extracting and milling a greater volume of ore. When the price is lower, it might only prove profitable to areas of higher-grade ore (“high grading”).

Because more countries are now engaged as gold producers, the gold mining industry has become more attractive to investors and mining operations. Supply has become more stable, albeit fragmented. As per estimates, around 183,700 tons of gold has been mined throughout history with another 56,000 tons still underground. However, because gold is indestructible, the mined metal continues to exist above ground in one form or another.

Figure 31: Classifying the type of demand driving gold price



Source: Cohen Grassroots Research

Due to high demand for gold, global mining companies add approximately 2,500 to 3,000 tons to the above-ground stock each year. The quantity of gold extracted can be divided into two categories:

a. Reserves that are economic to mine at the prevailing gold price.
b. Reserves that will be economic to mine based on further investigation or at a different price level.

Mining accounts for two thirds of the total supply of gold in the market each year. The remaining gold comes from gold recycling. Mining companies have two major revenue streams: selling newly mined gold at current prices and selling gold that is not yet mined. Selling gold not yet mined is a process whereby companies sell future mine products at a contracted gold price. Mining companies will receive this contracted price regardless of the current market price when it is produced. Since gold mining is a capital intensive industry, gold production hedging allows mining companies to protect themselves from the fluctuations in gold price and provides them with a guarantee on a percentage of their cash flow.

Gold de-hedging on the other hand involves closing these forward sales so that the company is no longer obligated to sell at the contractual price. De-hedging makes sense for a company when there is a certain expectation of a sustained rise in gold price. Hedging, generally, helps mid and small cap companies to fund their projects and manage debt. However, these agreements are now of a shorter duration and make up a small percentage of the global hedge book.

Aside from hedging deals, companies are also looking at raising capital through royalty and streaming deals. A royalty agreement enables the mining company to receive money up front in lieu of a counterparty obtaining the right to a percentage of future gold production form the mining operation. A streaming deal on the other hand, is an agreement where the counterparty receives a right to purchase gold production at a predetermined rate in return for a deposit. A royalty or streaming deal does not increase the availability of gold in the market as occurs in a hedging deal. A streaming or royalty deal are generally consummated to fund mining companies' ongoing production processes.

Gold does not vary much in its purest form. Gold from coins centuries-old will remain the same as a coin minted today. Gold types are generally a variation of pure gold, either taking different quantities or being mixed with another metal. Gold is generally described as a number followed by the letter 'K'. 24K is generally defined as 100% pure gold but in some countries 99% gold is deemed enough to justify as 24K. 12K is defined as 50% gold and 50% metal such as copper or silver. The quantity of gold percentage in a gold alloy can be calculated by dividing the karat value of gold by 24 and multiplying it by 100.

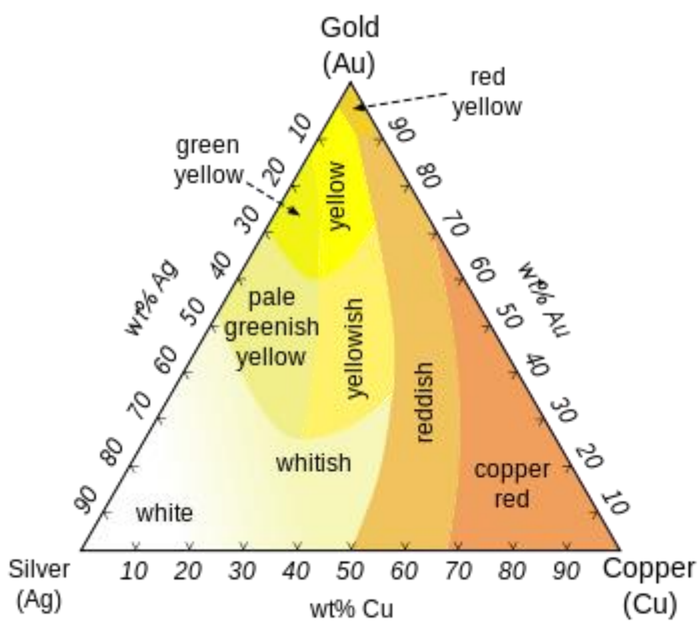
Figure 32: Classifying gold content based on carat values

Carat	% of Gold	% of other metal
24K	100%	0%
22K	92%	8%
18K	75%	25%
14K	58%	42%
12K	50%	50%
10K	42%	58%
9K	38%	63%

Source: http://goldresource.net/types-of-gold/

Gold can also be of different colors based on its mixture of other metals. White gold is pure gold mixed with either nickel, manganese or platinum. Rose gold is gold mixed with copper. The visual below will provide you with an idea of different ingredients for each color of gold.

Figure 33: Varying shades of gold based on mixtures with metals

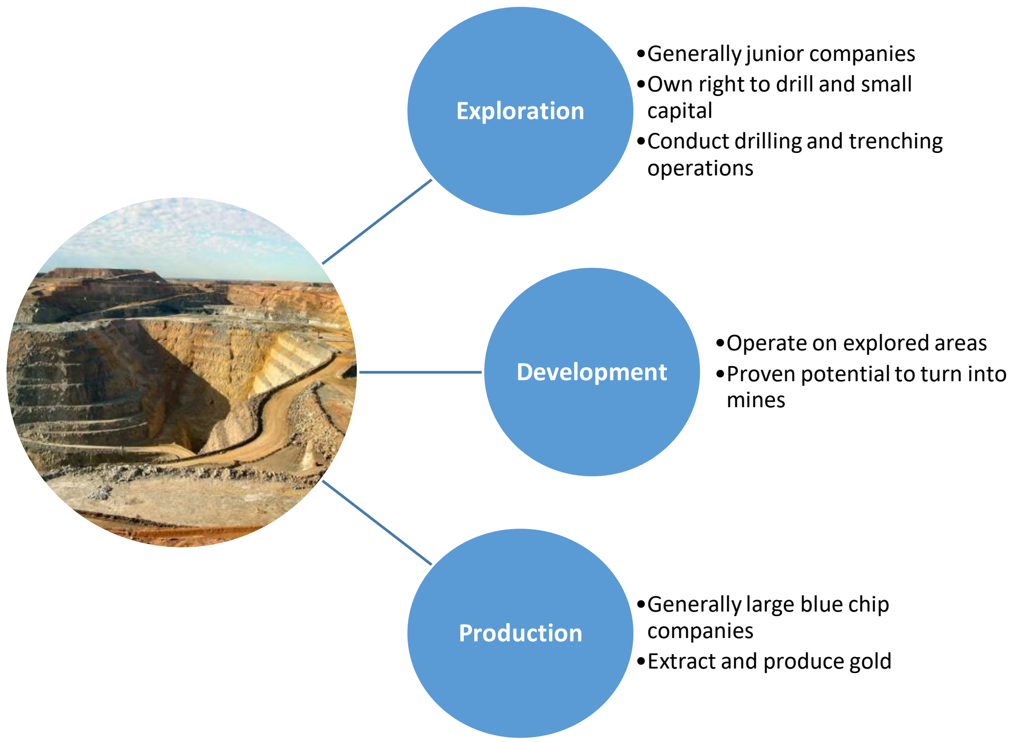


Source: http://goldresource.net/types-of-gold/

INDUSTRY OVERVIEW

The metals industry is not vertically integrated like other industries such as oil and energy. In the metals industry, companies that mine gold typically do not refine it. Refiners rarely sell it directly to the public. The industry encompasses three types of companies:

Figure 34: Types of companies in the gold mining industry



Source: Cohen Grassroots Research

To better understand the value of a company it is important to understand factors that influence the company and industry.

Figure 35: Factors affecting the value of a mining asset

Gold Price
- Jewelry & investment demand
- Value of USD
- Central bank reserves
- Economic growth
- Inflation

Operating Costs
- Lower the cost, greater the operating leverage
- Type of mines

Location
- Economic and political stability of the country

Ore Quality
- Placer ores
- Oxidised ores
- Primary ores
- Oxidised ores are the easiest to extract

Debt levels
- Capital intensive industry
- High debt strains company's ability to finance new capital expenditure

Source: Cohen Grassroots Research

A. Gold Price: The price of gold is a primary factor that influences the profits of the industry. Gold pricing is strongly pegged to supply-and-demand patterns. Low prices result in low production, while high prices result in high production. A myriad of market forces determines price.

- Jewellery and Investment Demand - Demand for gold jewellery accounts for more than 50% of the total demand. China and India are the largest consumers of gold. Both are creating growth markets. As demand for consumer goods such as jewellery and electronics increase, the cost of gold can rise.

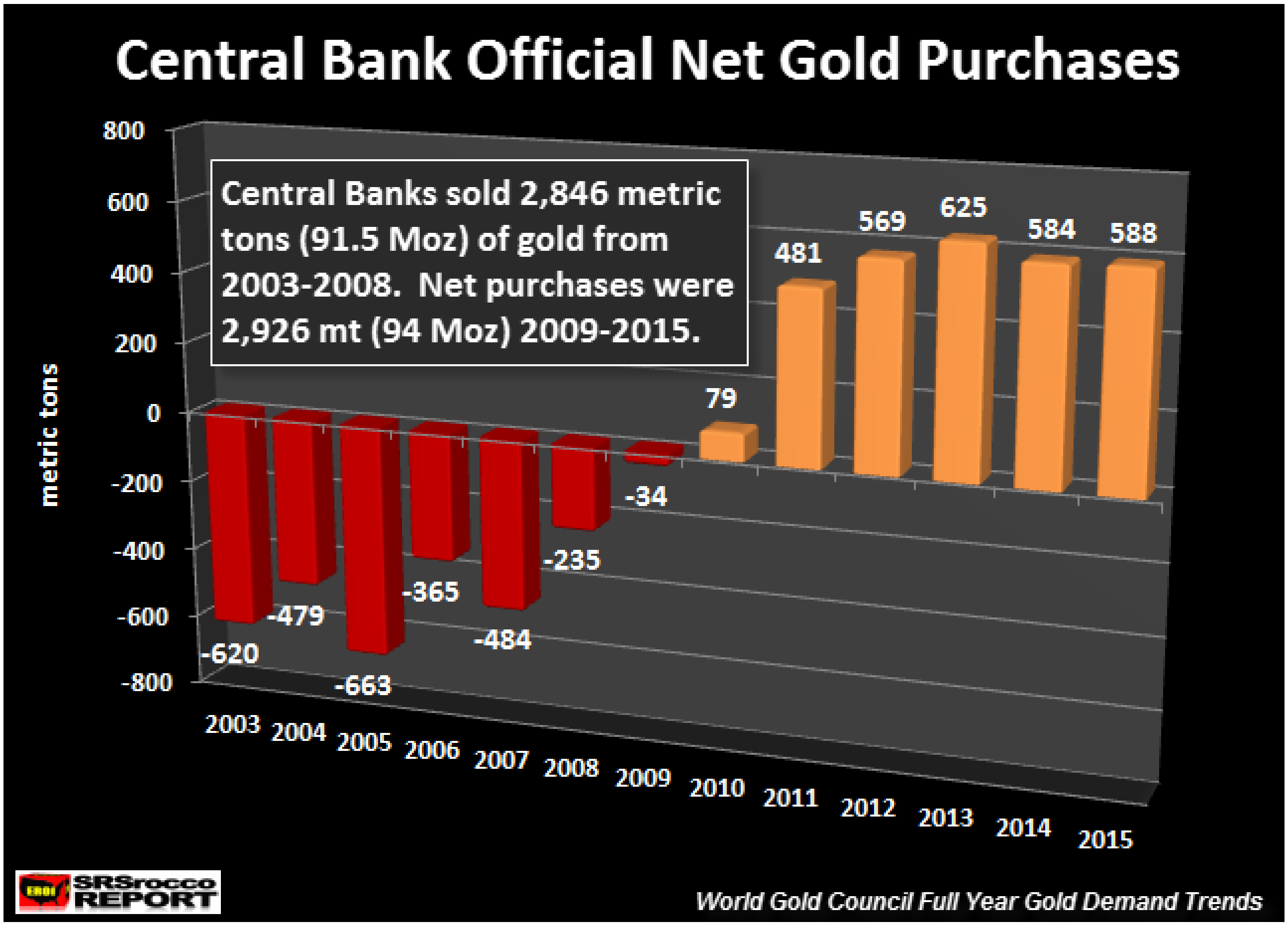
- The value of US Dollar – Gold is quoted in US dollars. Currency values can have a significant impact on prices. If the dollar weakens, worldwide investors begin to sell the currency and buy gold for security. This creates an increase in demand and consequently, an increase in gold prices. On the other hand, when the US dollar strengthens, demand for gold weakens.

- There's been a significant trend change in the gold market that has Western Central Banks worried. Before the problems with the U.S. Investment Banking system in 2008, annual net physical gold investment was negligible. However, the present situation has changed considerably, putting severe stress on Western Central Bank policy makers.

- Prior to 2008, many Central Banks (mostly Western) were net sellers of gold into the market. This official Central Bank policy was designed to keep the gold price from moving up higher.

According to the figures from the World Gold Council, from 2003 to 2009, net sales of Central Bank gold totalled 2,846 metric tons (mt), or 91.5 million oz (Moz):

Figure 36: Central-Bank-Offical-Net-Gold-Purchases-2003-2015



Source: World Gold Council Report

- <u>Central Bank Reserves</u> - Central global banks hold large reserves of gold. They buy and sell gold according to their currency fluctuations and the overall economic scenario. Changes in gold prices are primarily due to frequent transactions by these institutions.

- <u>Economic Growth</u> – The state of the global economies influence gold prices. Gold is viewed as the premier safe investment haven during difficult economic times. When the economic situation is weak and most other investments provide low returns, investors are likely to invest in gold because gold has performed well during crisis and turbulent economic time periods.

- <u>Inflation</u> - Gold is considered an effective hedge against inflation and currency devaluation. Currency values fluctuate, but gold values, in terms of what an ounce of gold can buy, might remain more stable in the long term. Because gold maintains value primarily outside of politics, it is valued worldwide. Gold is attractive as a low-risk, solid investment in the midst of floundering and fluctuating currencies. Investors may feel encouraged to buy gold when they believe the value of their paper money will decline.

- Other Factors - While these are some of the major factors that affect the price of gold, there are several other factors including trading and speculation, national emergency situations, increase in per capita income, government policies, etc. that play an important role in the process.

- One of the major looming factors that could influence the price of Gold in 2017 is the emergence of Islamic and Sharia compliant Gold purchase mediums, investment programs and ETF vehicles.

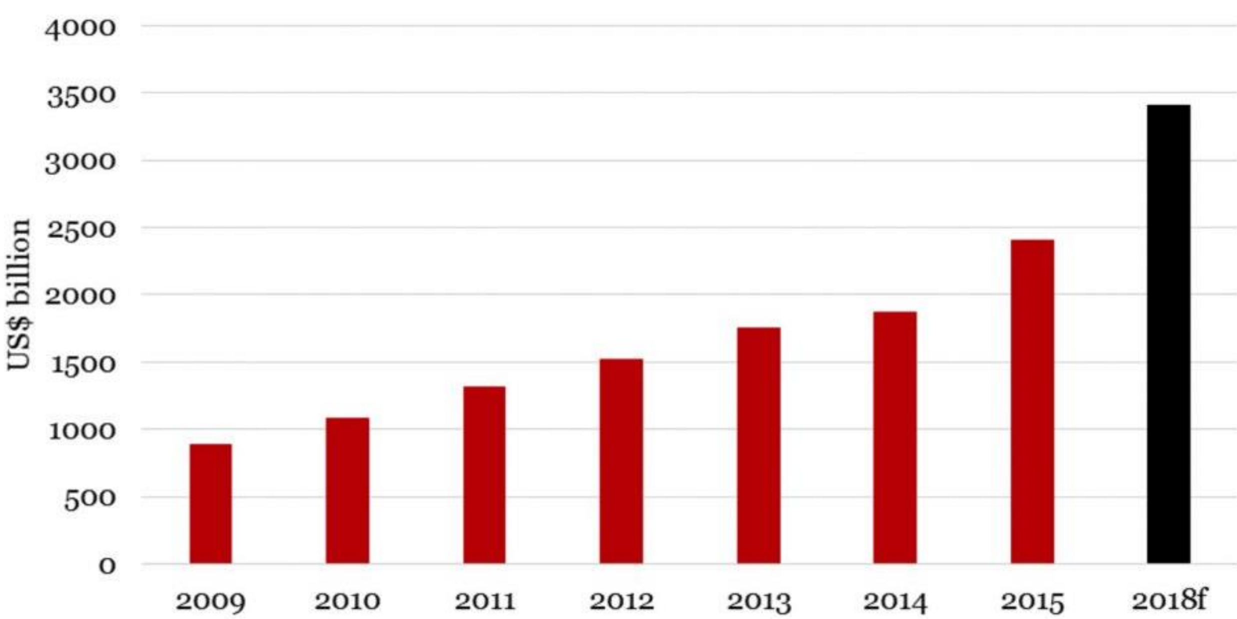
ISLAMIC GOLD

According to the Gulf Times: "The Islamic finance entry into the gold market could definitely shake the gold market as Islamic financial institutions around the world, which hold around $2 trillion in assets and are expected to double that asset base up to 2020, would certainly unleash large funds to participate in the Shariah-compliant gold trade".

One bullish gold price theory is the coming 'sharia gold standard'. "Shariah compliant gold could lead to a significant source of new demand for physical gold coins and bars in the Islamic world. It is believed that this will contribute to much higher gold prices as some of the $2 trillion of assets held in Islamic financial institutions are allocated to the very small physical global gold market. In 10 years, gold has risen over 367% in US dollar terms and by more in currencies used in Islamic countries. Gold bullion products additionally appealing to Islamic banks due to Basel III and the New Sharia Gold Standard will impact gold price just through the sheer weight of new purchasing power.

By the end of 2016, 1.6 billion people will likely have a new gold investment standard for the first time in modern history. These 1.6 billion people are the Muslims of the world who constitute nearly 25% of the 6.9 billion people on the planet. This new 'gold standard' is the Sharia gold standard developed as part of a three-party collaboration between AAOIFI, the World Gold Council (WGC) and Amanie Advisors."

Figure 37: Total Islamic Finance Assets



Source: The International Shari'ah Research Academy for Islamic Finance

B. <u>Operating Costs</u>: The difference between production costs and the future price of gold equals the gross profit margins for mining companies. Therefore, the cost of production is perhaps the most widely used critical measure for analysing gold producers. The lower the costs, the greater the operating leverage, the greater is the staying power. Also, the type of mine a company uses is an important factor in production costs. Most underground mines are more expensive than open pit mines.

C. Location: Mine location is a critical factor. Political unrest in developing nations can ruin a company, however, these nations also provide cheaper labour and mining costs. The company must balance its risk.

D. Ore Quality: Higher quality ore will contain more gold, which is usually reported as ounces of gold per ton of ore. As a rule of thumb, oxide ores are better because the rock is more porous, making it easier to remove the gold.

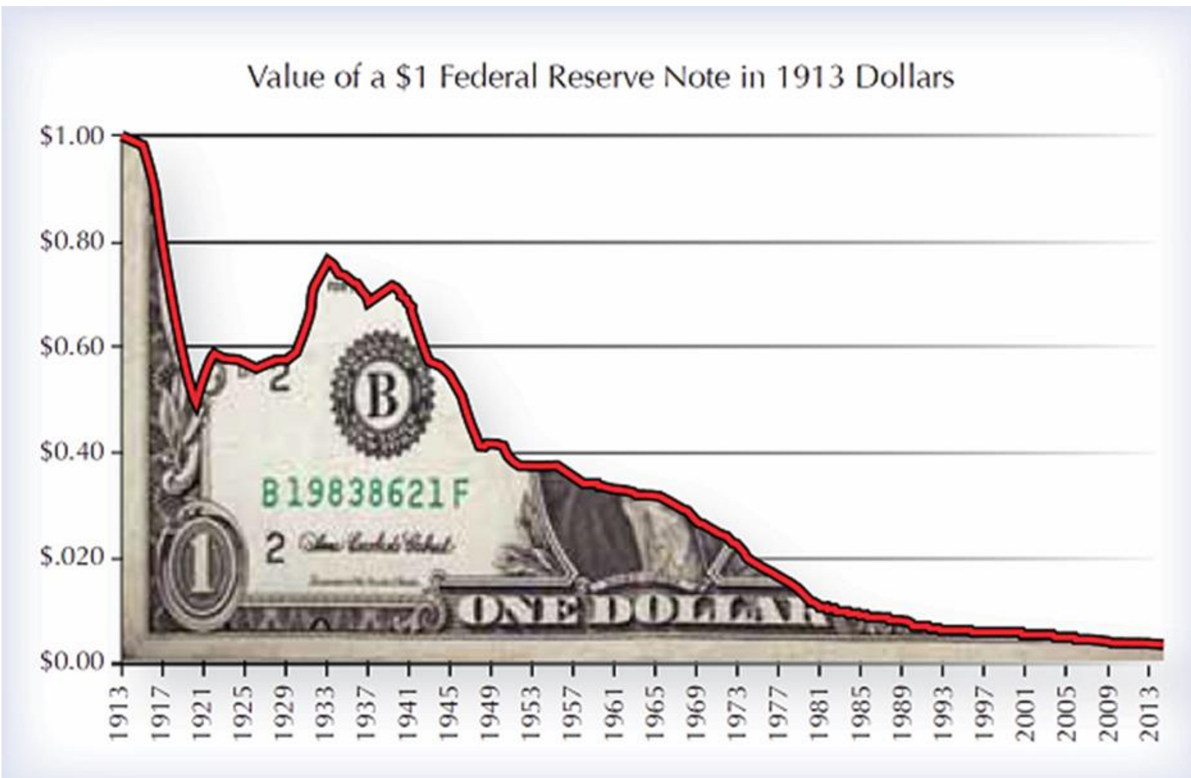
E. Debt Levels: Gold production is capital intensive. Annual capital budgets can easily range between $500 million and $1.0 billion. Most producers usually operate with moderate debt-to-capital ratios with most of the capital expenditure being funded internally. High debt puts a strain on credit ratings, weakening the company's ability to purchase new equipment or finance other capital expenditures.

F. Government debt levels worldwide and global debt in general is a significant supportive factor behind today’s gold price and much of the multi hundred percent increase in gold over the past nearly two decades as debt has soared to all-time record levels approaching $20 Trillion in the US, during a period in which the last 8 years saw more debt added than in the U.S.’s total history. At the same time, inflation is constantly eating away at the Dollar’s value, (see chart below) and in time, the only way out of this debt problem is to monetize it through higher inflation, which ultimately destroys the value of money and also destroys the old value of debt at the same time. The only refuge or defence against this is to invest in gold and silver or other hard assets. However, gold has stood the test of time as the ultimate store of value and given the unprecedented record rate of current accumulation worldwide, it is not hard to see that everyone from the Chinese, Russian, Indian and Turkish Governments et al believes that buying gold is akin to buying insurance. While the Chinese have made massive returns on their bond investments and in US Dollars over the past two decades, they are now faced with the double whammy prospect of having both these values go strongly against them. This may be why they have been using their hundreds of billions in profits to buy gold and effectively hedge themselves against a potential major downturn in bonds and the US Dollar since they are restricted in how many bonds they can sell at any one time and have to spread them out over long periods of time according to a number of sources familiar with these operations.

GOLD ACCUMULATION

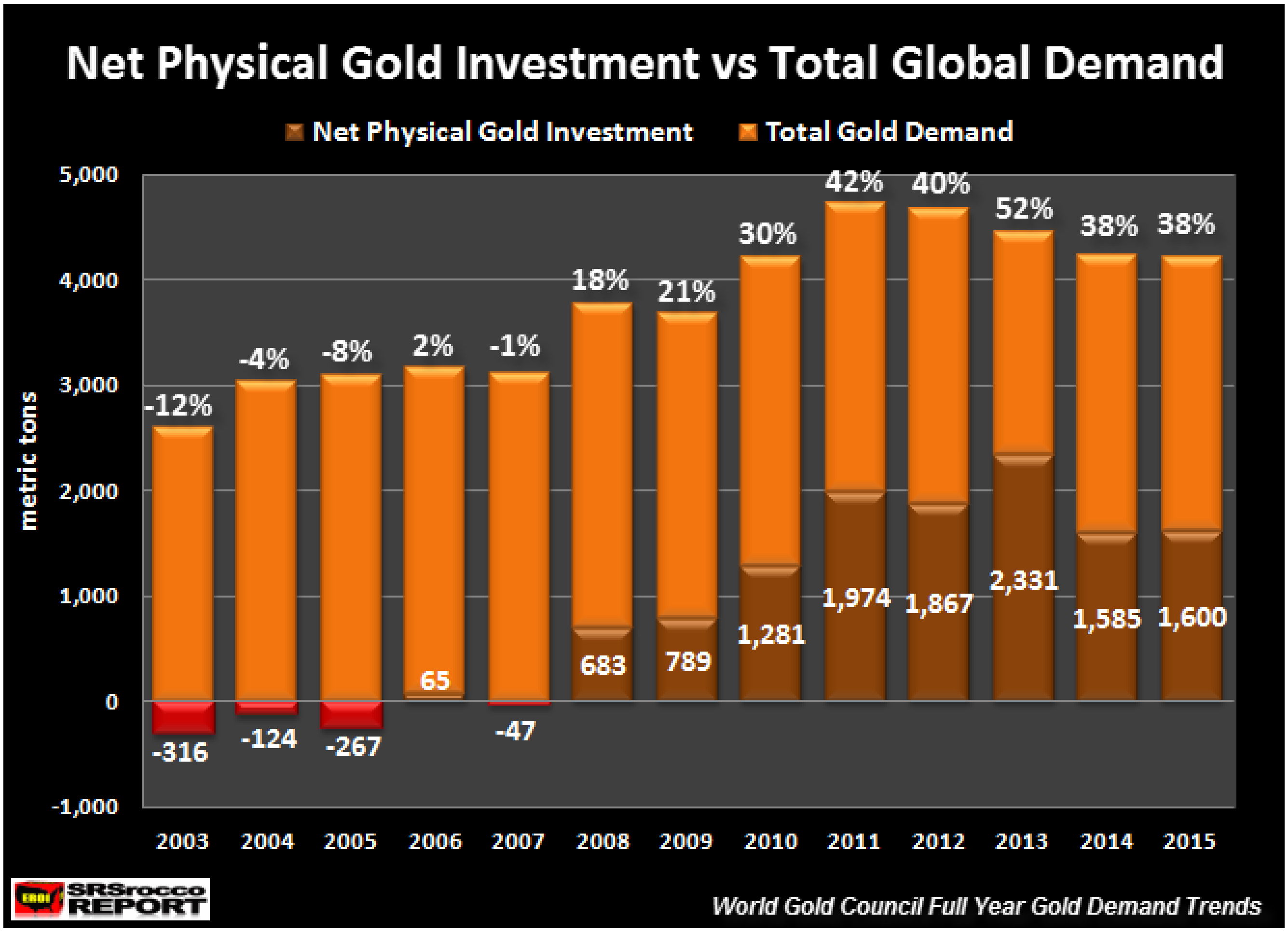
The bottom line is the increasing amounts of gold are now being accumulated as never before. With the upcoming shortages likely being envisaged, if demand were to soar any further, it could cause some very rapid upward price movements in gold that could come without warning. This is what we increasingly foresee coming towards the end of this decade as US debt levels soar to $22 Trillion and inflation begins with more intensity. In addition, the prospects of a weakening US Dollar as it begins its new seven-year cyclical downtrend, could mean a reprieve for oil prices and commodities in general which would then translate into higher gold prices as inflation accelerates. As the world gets richer, especially the middle class of China and India, demand for gold could soar to new heights. Upward momentum could be maintained for years, just as it was during the last upturn from 2001 through 2011. It is possible to envisage a seven-year bull market, only this time the anticipated uptrend in gold and silver prices could be fortified by the fact that gold production is expected to decline 50% over the next 7 years thereby compounding the situation.

Figure 38: Value of a $1 Federal Reserve Note



Source: US Bureau of Labour Statistics

Figure 39: Gold Investment vs Global Demand

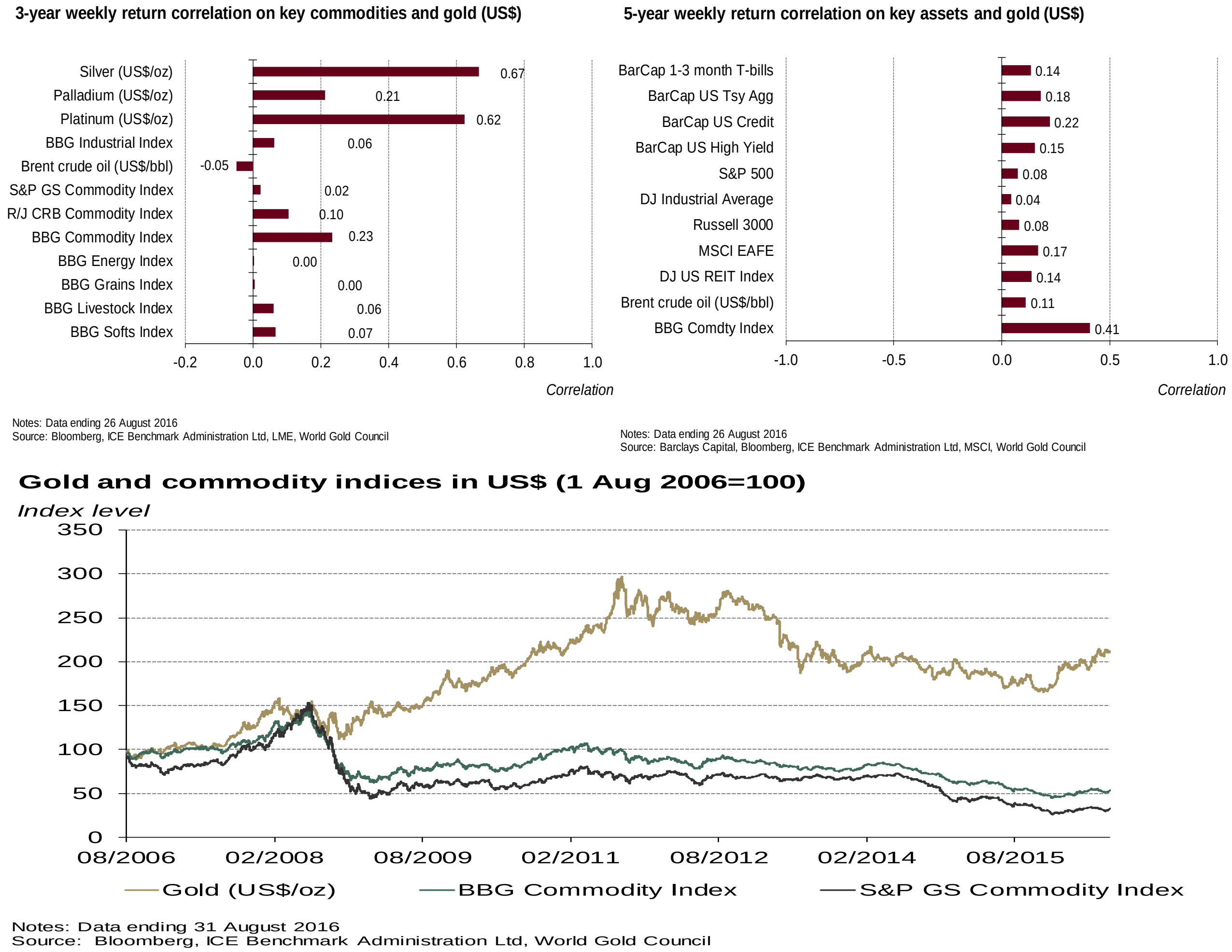


Source: World Gold Council Report

As a quasi- currency, the price of gold is subject to volatile price movements with a number of factors affecting price. In addition, the mining industry is regulated by governmental and environmental laws. SFEG, as a company in the precious metals industry, is primarily concerned with the gold, and silver trends.

Gold is a unique commodity and is the go-to investment option during lean and prosperous times. In the long run, gold is not as highly affected by the vagaries in business cycles. Gold is weakly correlated to other commodities and only shares an inverse relation with USD similar to other precious commodities. When compared to other financial assets, a change in the price of gold does not correlate to a change in the price of these financial assets. Over the past 10 years, the correlation between gold and US equities and Treasury bills has been close to zero. Gold trades between 10% to 30% for bonds, world equities, and REITs. Compared to the period from August 2006 to August 2015, gold has considerably outperformed the BBG Commodity index and S&P GS Commodity Index.

Figure 40: Performance of Gold Prices vs Key Indices

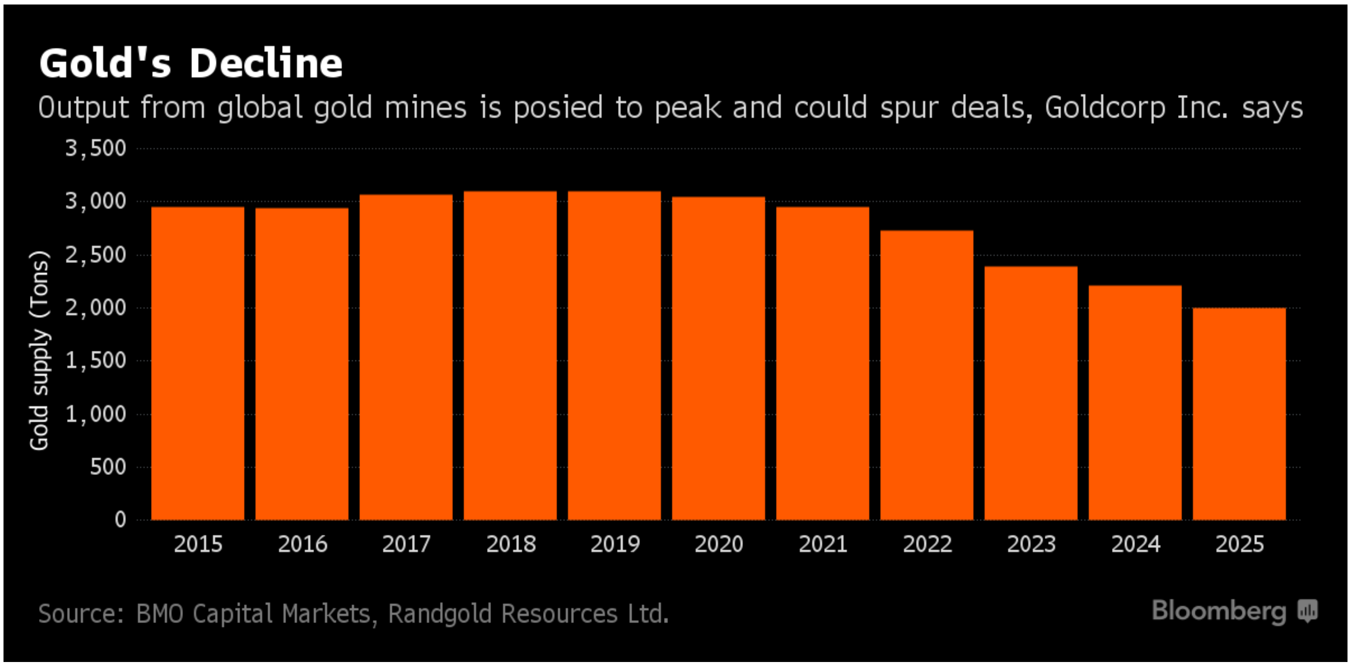


Source: Bloomberg, ICE Benchmark, World Gold Council

The lack of corelation between gold and other assests is a result of the different demand and supply fundamentals affecting gold. Gold functions both as a luxury good. More than 68% of its annual average demand for the past five years is derived from jewelry, as an investment vehicle and from industrial applications. The latter two account for the remaining 32% of average demand in the past five years. As an asset class, gold has outperformed other assets classes reporting 10% annualized returns over a period of two years. Gold has been the first or the second best asset class performer for five or seven years between 2005 – 2011. This substantiates gold's safe haven as an investment during difficult times and recessionary periods.

An important bullish theory is that a 50% decline in gold output over the next 8 years would increase global demand while the dollar weakens. Peak gold production is happening globally. This is "bullish for gold" according to a slowly emerging group in the gold industry. It is important to see the reality of peak gold production slowly being acknowledged in the mainstream. It is an important fundamental factor in the market that has been continuously ignored.

Figure 41: Gold's Decline



Source: As reported by Bloomberg in 'Decade of Gold Mine Declines Poised to Spur Deals

According to Goldcorp Inc. "Gold's dwindling pipeline of new mines is poised to usher in a decade-long output slump, spurring prices and delivering a new impetus for deal making and industry consolidation". "Mine supply may fall about a third in the 10 years to 2025, according to Bloomberg calculations based on forecasts from BMO Capital Markets and Randgold Resources Ltd. The number of newly discovered primary gold deposits fell to three in 2014, from a peak of 37 in 1987, according to Melbourne-based industry adviser MinEx Consulting Pty."

Mark Bristow, Randgold's CEO stated: "Gold production may peak in the next three years as miners fail to replace their reserves. And, according to Goldcorp's Telfer, "producers have limited scope to raise output in response to higher prices. "We are having a heck of a time finding gold," he said. "The metal is up 16 percent this year, rebounding from three straight annual declines. Gold may average $1,500 an ounce by 2020, according to an August note from BMI Research."

"Once supply from mines starts to decline and people start to realize the impact that's going to have, I think it's going to be incredibly bullish for gold," Telfer said in the interview last week in Melbourne. "If gold went to $2,500 an ounce tomorrow, Goldcorp's production wouldn't change for the next four years. It can't react to a change." 'Peak Gold' is happening which has important ramifications for gold prices and is why we were one of the first analysts in the industry to consider the peak gold phenomenon back in 2007 and 2008."

Goldman Sachs now acknowledges the importance of peak gold to the gold market. It is another long term positive fundamental for the market and will support prices and could contribute to much higher prices in the coming volatile and uncertain years.

Figure 42: Total Returns by Asset Class Rankings

Total Returns by Asset Class Rankings

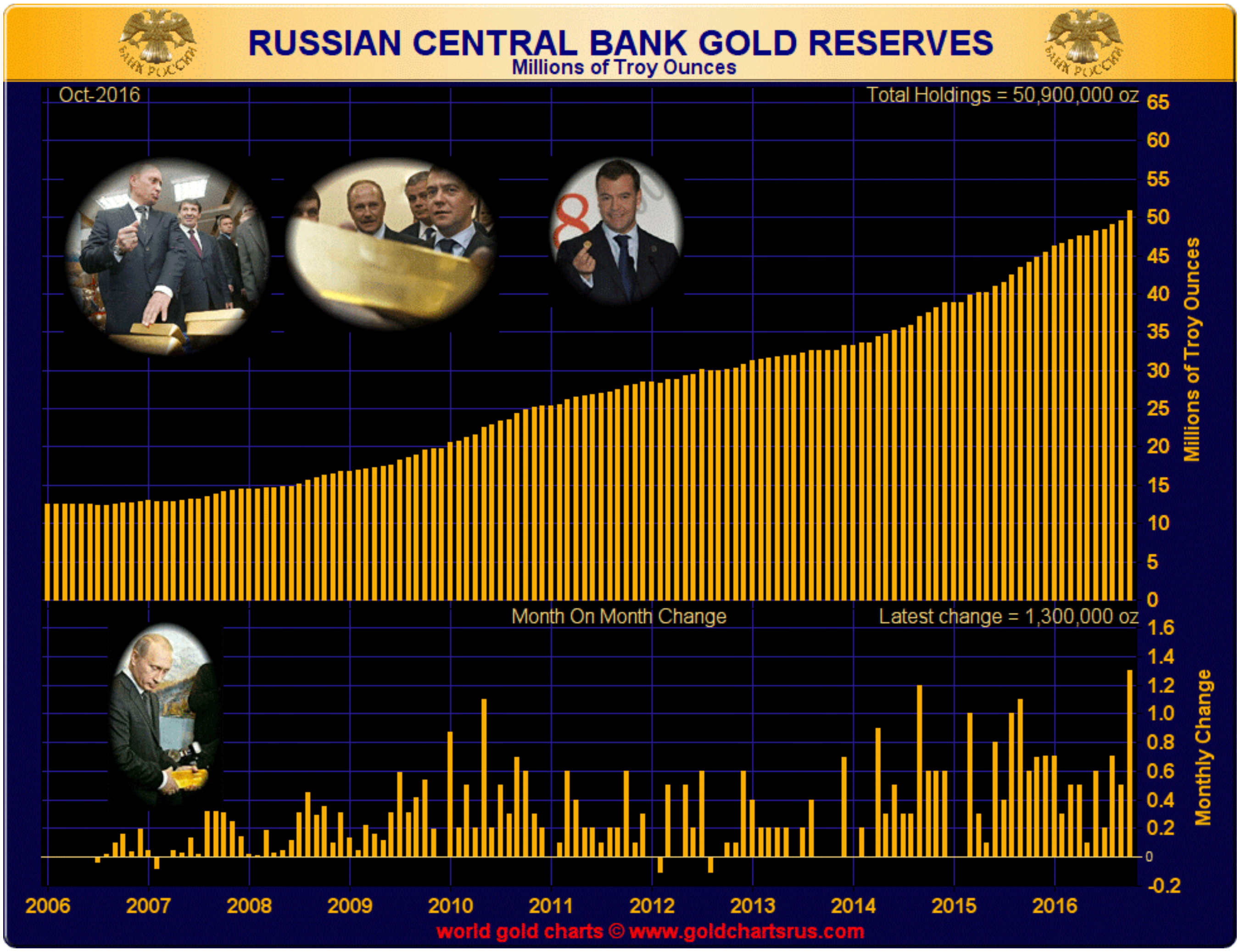
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	10-Years 2005-'14 Annualized	January-June 2015
REITs 30.4%	MSCI EmMkts 33.6%	REITs 34.0%	MSCI EmMkts 39.2%	Barclays Agg Bond 5.2%	MSCI EmMkts 78.0%	Gold 29.3%	Gold 9.6%	REITs 19.7%	Russell 2000 38.6%	REITs 27.2%	Gold 10.0%	MSCI EAFE 7.0%
MSCI EmMkts 25.5%	Gold 17.8%	MSCI EmMkts 32.1%	Gold 30.5%	Gold 4.9%	S&P 400 36.9%	REITs 27.6%	Barclays Agg Bond 7.8%	MSCI EmMkts 18.3%	S&P 400 33.2%	S&P 500 13.5%	S&P 400 9.6%	Russell 2000 4.8%
MSCI EAFE 20.5%	B'berg Commod 17.5%	MSCI EAFE 26.8%	MSCI EAFE 11.8%	Russell 2000 -33.6%	MSCI EAFE 31.7%	Russell 2000 26.6%	REITs 7.3%	S&P 400 17.7%	S&P 500 32.0%	S&P 400 9.7%	MSCI EmMkts 8.8%	S&P 400 4.2%
Russell 2000 18.1%	MSCI EAFE 14.0%	Gold 22.5%	B'berg Commod 11.1%	S&P 400 -35.9%	REITs 27.8%	S&P 400 26.4%	Mkt Neut HFs 4.5%	MSCI EAFE 17.7%	MSCI EAFE 23.1%	Barclays Agg Bond 6.0%	Russell 2000 7.7%	MSCI EmMkts 3.1%
S&P 400 16.3%	S&P 400 12.5%	Russell 2000 18.2%	Mkt Neut HFs 9.3%	S&P 500 -36.6%	Russell 2000 26.7%	MSCI EmMkts 18.9%	S&P 500 2.1%	Russell 2000 16.3%	Mkt Neut HFs 9.3%	Russell 2000 4.8%	S&P 500 7.6%	S&P 500 1.2%
S&P 500 10.7%	REITs 8.3%	S&P 500 15.6%	S&P 400 8.0%	B'berg Commod -36.6%	S&P 500 25.9%	B'berg Commod 16.7%	S&P 400 -1.7%	S&P 500 15.9%	REITs 2.3%	Mkt Neut HFs -1.2%	REITs 7.3%	Gold 0.5%
B'berg Commod 7.6%	Mkt Neut HFs 6.1%	Mkt Neut HFs 11.2%	Barclays Agg Bond 7.0%	REITs -37.8%	Gold 24.0%	S&P 500 14.8%	Russell 2000 -4.2%	Gold 6.6%	Barclays Agg Bond -2.0%	MSCI EmMkts -2.0%	MSCI EAFE 5.2%	Barclays Agg Bond -0.1%
Mkt Neut HFs 6.5%	S&P 500 4.8%	S&P 400 10.3%	S&P 500 5.6%	Mkt Neut HFs -40.3%	B'berg Commod 18.7%	MSCI EAFE 8.1%	MSCI EAFE -11.1%	Barclays Agg Bond 4.2%	MSCI EmMkts -2.3%	Gold -2.2%	Barclays Agg Bond 4.7%	B'berg Commod -1.6%
Gold 4.6%	Russell 2000 4.4%	Barclays Agg Bond 4.3%	Russell 2000 -1.5%	MSCI EAFE -41.8%	Barclays Agg Bond 5.9%	Barclays Agg Bond 6.5%	B'berg Commod -13.4%	Mkt Neut HFs 0.9%	B'berg Commod -9.6%	MSCI EAFE -4.0%	Mkt Neut HFs -1.0%	Mkt Neut HFs -1.9%
Barclays Agg Bond 4.3%	Barclays Agg Bond 2.4%	B'berg Commod -2.7%	REITs -17.8%	MSCI EmMkts -52.2%	Mkt Neut HFs 4.1%	Mkt Neut HFs -0.8%	MSCI EmMkts -17.8%	B'berg Commod -1.1%	Gold -28.3%	B'berg Commod -17.0%	B'berg Commod -3.3%	REITs -5.4%

Source: Oppenheimer Asset Management Research, Bloomberg's total returns calculator, Standard and Poor's, Credit Suisse, Barclays, MSCI, Bloomberg, and NAREIT. At press time, June, 2015 data for the Credit Suisse Hedge Fund Neutral Index was not yet available.
Return calculations exclude applicable costs including interest and commissions.

The strengthening of the US Dollar and a possible increase in the interest rates influenced the price of gold in 2015. In 2015, gold prices traded between $1,046 per ounce to $1,308 per ounce. The average market price for the year was $1,160 per ounce, representing a decrease of 8% compared with 2014. A rate increase in 2015 would imply an improving economy. Gold prices lagged due to the decreased global ETF's of 4 million ounces in 2015. This can be compared to 5 million ounces in 2014 and 29 million ounces in 2013. However, there has been a price recovery in gold prices based on anticipated macroeconomic risks, a projected increase in interest rates in the US, growing demand for gold jewelry from China and India and through official sector buying, especially from China and Russia. Chinese gold reserves have grown by 50% from 2006 to 1,658 tons. Russia purchased 77tons to increase its reserves to 144 tons.

MASSIVE RECENT RUSSIAN PURCHASE OF GOLD

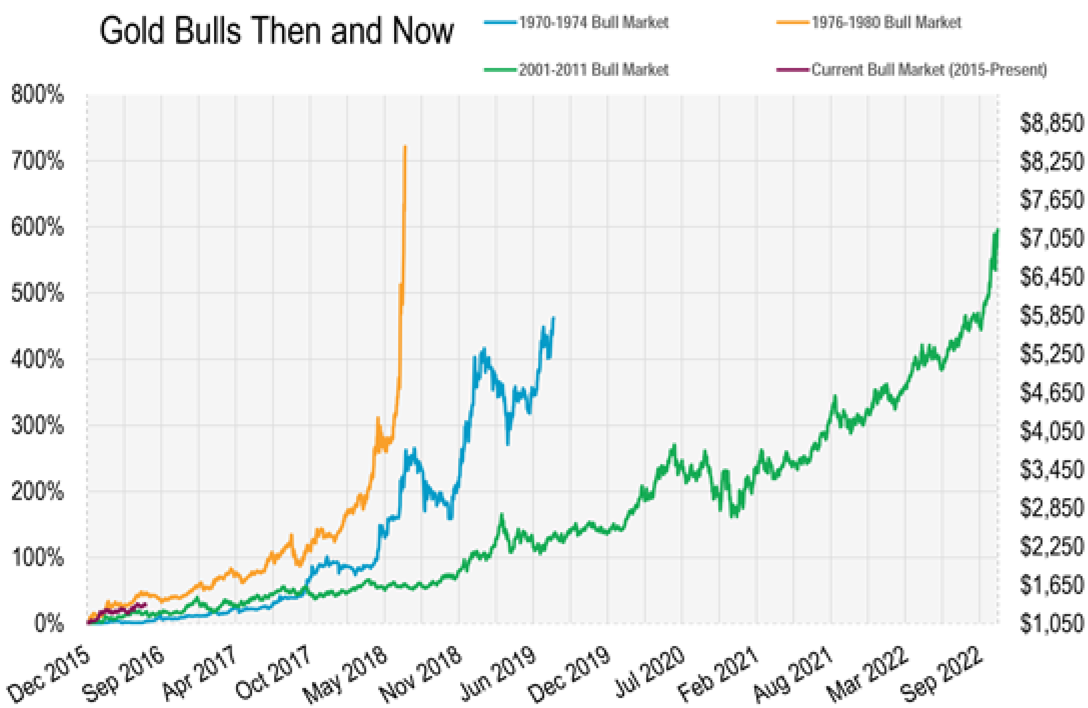
Figure 43: Russian Purchase of Gold



Russian gold buying in October 2016 is the largest monthly allocation since 1998. The country bought 48 metric tonnes or 1.3 million ounces of gold bullion. This is the largest addition of gold to the Russian monetary reserves since 1998. The Russian central bank gold purchase is the largest monthly gold purchase of this millennium. Concerns about systemic risk, currency wars and the devaluation of the dollar, euro and other major currencies has led to ongoing diversification into gold bullion purchases by large creditor nation central banks such as Russia and China. Prudent investors are following Russia's lead diversifying into Gold assets to physical gold coins and bars.

Factors Affecting Gold Prices

Figure 44: Gold Bulls



Source: Company Material

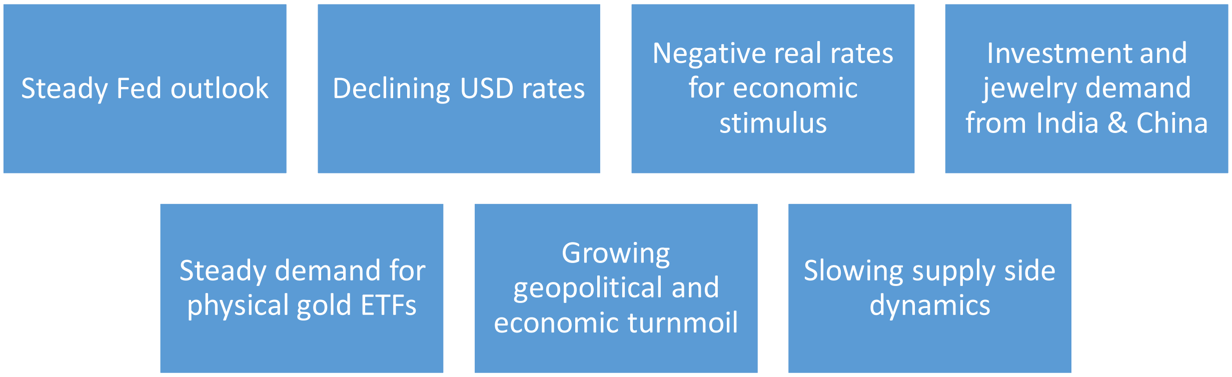
Current and Future Bull Market as depicted by the purple line compared to past bull markets projected forward. In past bull markets gold has tended to rise slowly at first, then very dramatically towards the end of their runs.

Figure 45 Price of gold for the year starting October 2015

Source: World Gold Council

Gold prices made a slight comeback in 2015 but again fell below the $1,100 USD mark in December 2015. Since then, the gold market price has experienced a 26% increase in 2016 that has enabled profitable mining companies to post stock price increases of more than 300%.

Figure 46 Factors affecting the price of gold

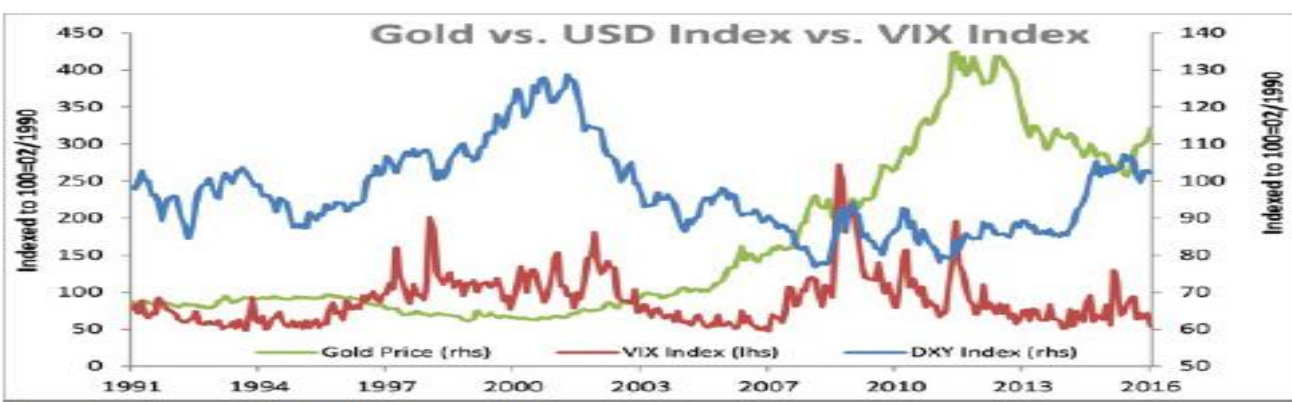


Source: Cohen Grassroots Research

The effects of the 2008 meltdown are still lingering. In addition, the unfolding euro crisis, the Brexit vote, and problems faced by major lenders in Europe are likely to peak investor concerns. Clashes in Libya indicating an underlying geopolitical instability and the slowdown in the Chinese economy have created turmoil during the period of 2016 – 2017. The VIX index, a proxy for implied volatility is increasing. We believe this volatility may increase the price of gold. The ever growing demand for Gold is being driven by an increasing anxiety among investors as the smart money has sensed long term difficulties. The Governments of China, Russia, India and Turkey must feel the same way given how they are also accumulating gold on a scale never before seen. In late November, the Turkish Lira crashed to new all-time record lows validating and endorsing their strategy to at least obtain some protection against its falling currency.

Earlier this year, as the Brexit vote crashed the British Pound to new decade lows, the UK suddenly became a record buyer of gold that helped Gold soar almost $100 overnight in one of the largest up moves ever recorded.

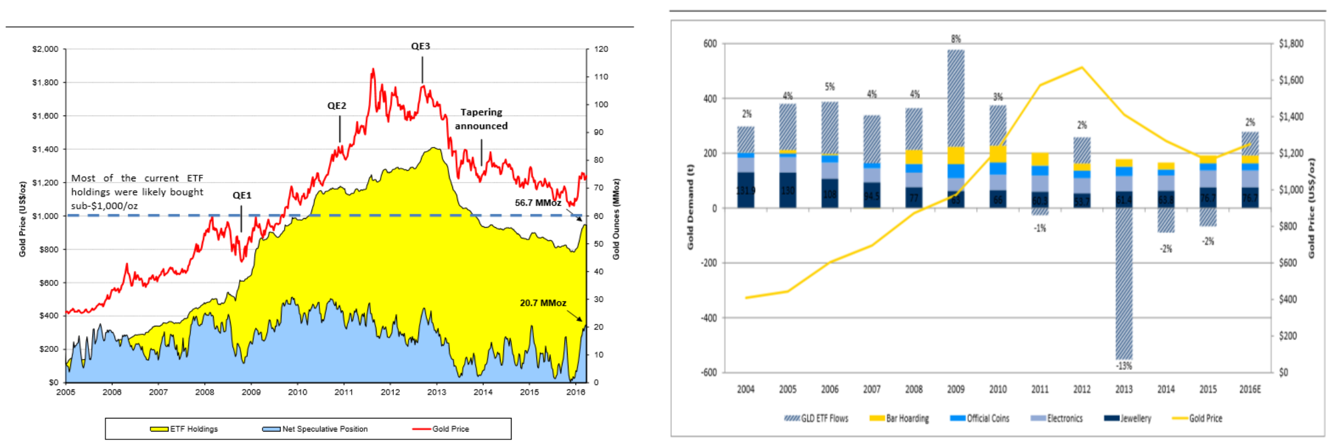
Figure 47: Gold Performance vs US Dollar Index vs Volatility Indext



Source: Bloomberg, Morgan Stanley Research

The increase in volatility has led to increasing demand from the West. Also, H1 2016 investment demand of 1064t passed the post-2008 sub-prime crisis levels of 917t for the first half of 2009. The creation of physical gold ETFs in 2004 has led to an increase in physical demand. This increase in demand is responsible for driving the price of gold from 2005 – 2007. While speculative gold inflow and outflow can cause price fluctuations, minimal outflow from gold ETFs will be required to maintain high gold prices in 2017.

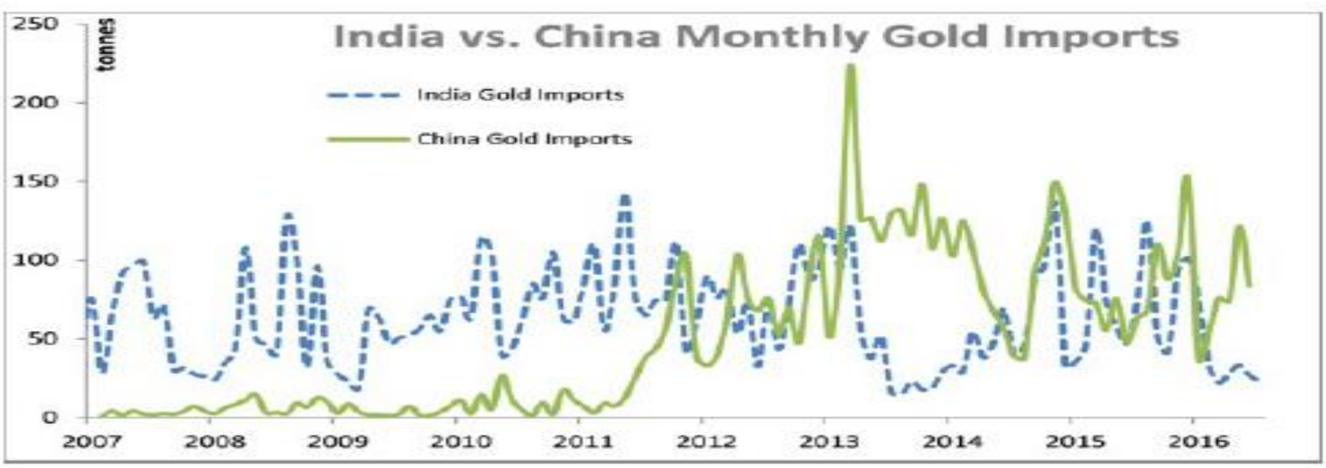
Figure 48: Gold Holdings and Speculation Interest



Source: Comex and Bloomberg

Nearly 50% of global demand for physical gold comes from China and India. The increase in Chinese demand increased during the liquidation of global gold ETFs in 2013. In 2016, China is expected to consume 25% of the world global demand and remains one of the major miners of gold in 2015 at 458t.

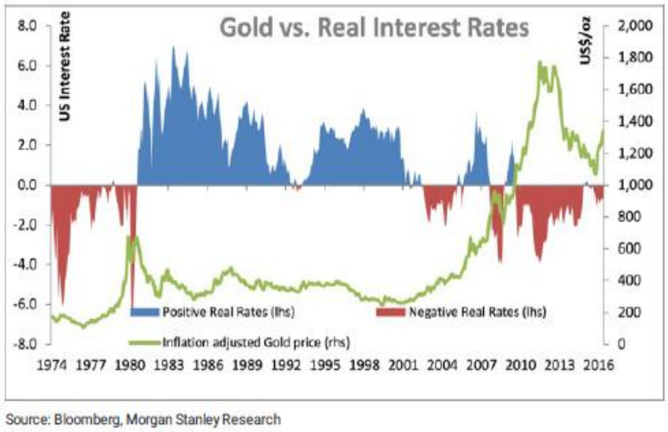
Figure 49: Gold Imports - China vs India



Source: Bloomberg and Morgan Stanley Research

Gold has a strong negative correlation with real interest rates and has an inverse relationship with the value of the dollar. With growing weakness in European markets and now Chinese markets, real interest rates have been negative due to the Fed's dovish monetary policy. Since 2002 to 2010, the dollar had lost 33% of its value while the price of gold market has risen from $248 to $1,420.

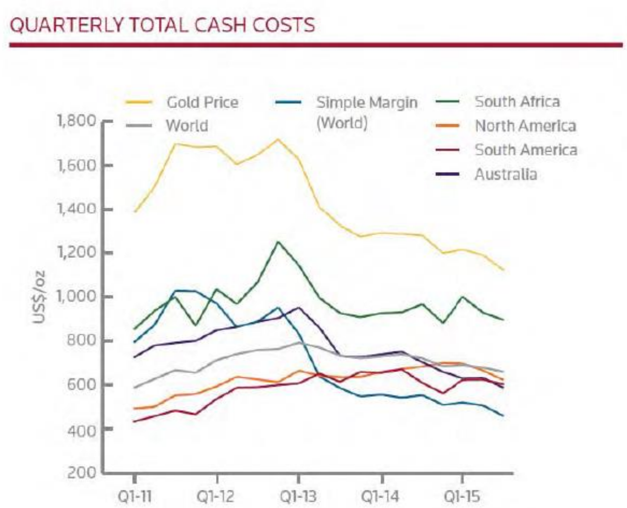
Figure 50: Gold vs Real Interest Rates



Source: Bloomberg and Morgan Stanley Research

As a capital intensive industry, gold mining companies also seek to control operating costs to maintain profitability. Operating costs during the bull-run in the gold market increased and put pressure on the bottom line of most mining companies. In the first nine months of 2015, total cash costs for producers decreased by 7% year-on-year from $733/ounce to $680/ounce. Gold equities also lowered their operating costs.

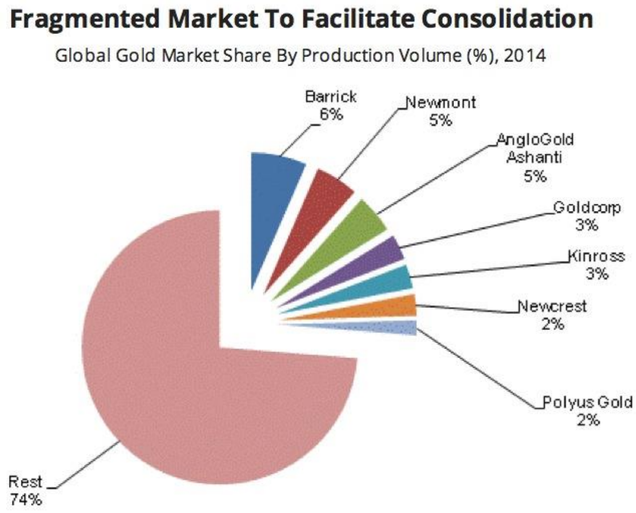
Figure 51:Quarterly Total Cash Costs



Source: Miningworld website

The gold mining industry is fragmented with small firms looking at exploration as a means of entering the industry while large firms look at mining to generate incomes. In time, we believe the industry will see an increase in consolidation and divestment. Diversified miners will look to sell assets to play in this capital intensive industry and more deals looking favorable for investors supported by strong market prices.

Figure 52: Gold Production Market Share

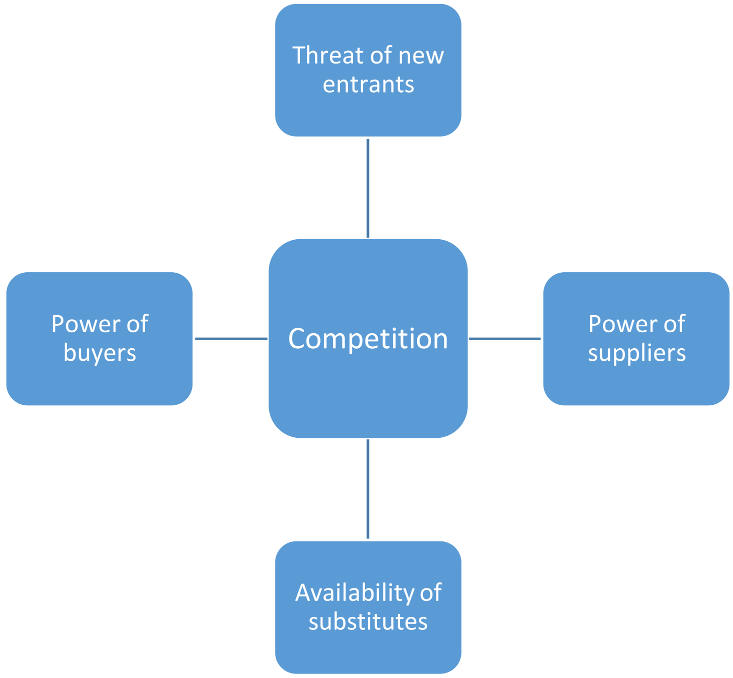


Source: BMI Research's Global Gold Mining Landscape Report.

Another factor affecting gold production is the supply side which lags behind future demand. Since gold is not a perishable commodity, the supply side does not affect the price significantly. When asset classes other than gold have prospered, there is generally a drop in the supply of gold. However, as prices increases, producers are incentivized to conduct exploration and sink capital in mining gold.

COMPARATIVE ANALYSIS

Figure 53: Porters Five Force Analysis



Source: Cohen Grassroots Research

Threat of New Entrants. Financing is a principal barrier to entry in the capital intensive precious-metals industry. Constructing mines, production facilities, exploration and development and mining equipment all require large sums of capital. This capital is required before the mine is in production. Therefore, favourable financing terms are extremely important.

Power of Suppliers. The supply-side issues that miners face deal with are government regulations and rules. The supply of land is plentiful, but gaining approval and permits to mine the land can be difficult, especially if environmental risks are high.

Buying Power. Gold is a commodity-based business. Therefore, gold from one company if the quality is similar is not that much different from another company's quality. Claims with higher grades of gold are valuable. This translates into buyers seeking lower prices and better contract terms.

Availability of Substitutes. Substitutes for the precious metals industry includes other precious metals such as diamonds, silver, platinum, etc. These are valuable substitutes for gold but are not as widely accepted as gold. Gold has the advantage of being standard for a world currency. Therefore, a gold bar in the U.S. is worth the same as it is in Ecuador. As other forms of precious metals such as diamonds gain popularity, they may also become more competitive as substitutes.

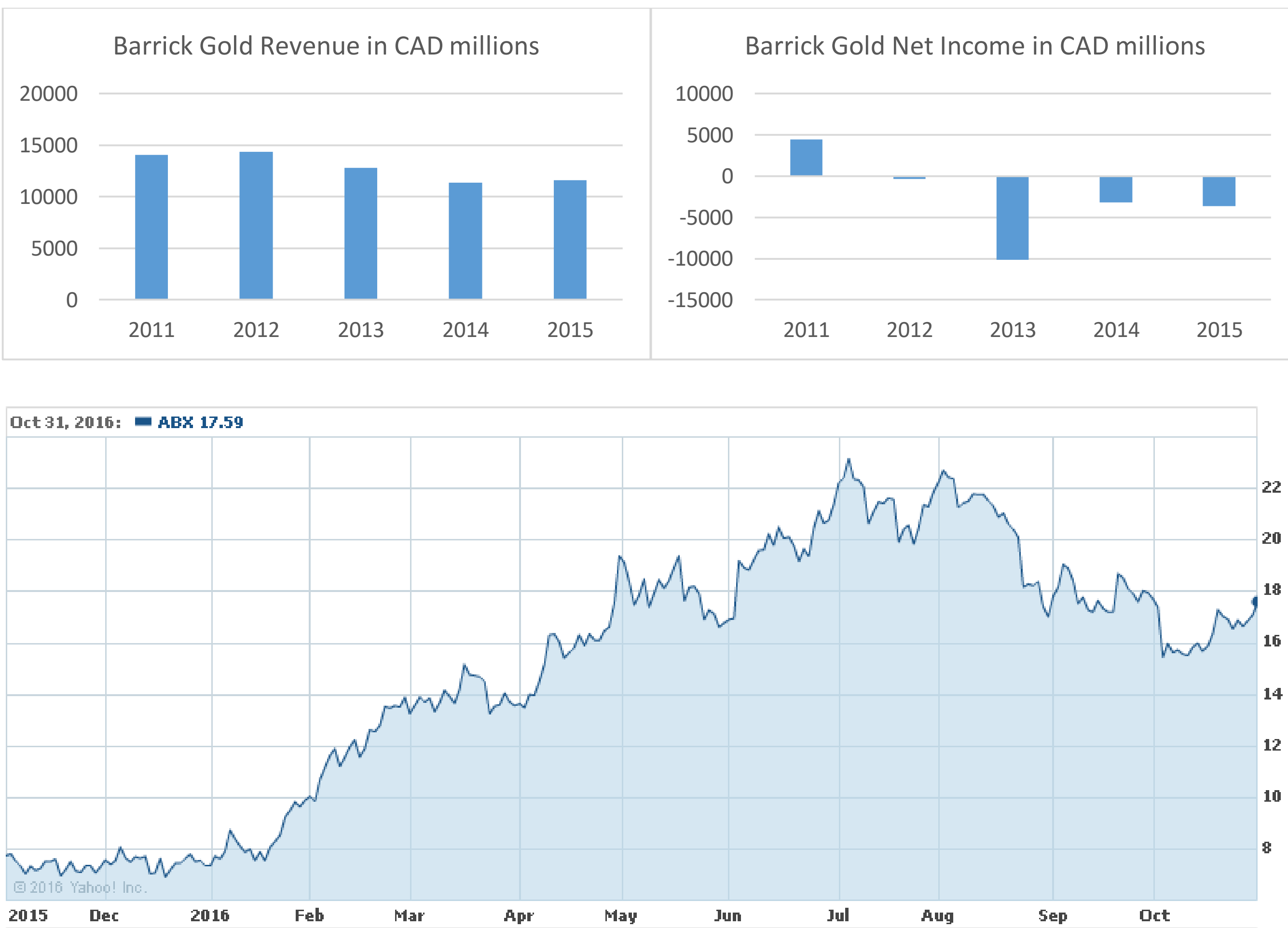
Competition. Gold companies do not compete on price, mainly because the prices are determined by market forces. However, gold companies do compete for land. The backbone of a precious metals company is its reserves. The only way to enhance reserves is to explore for good mining areas. Companies go to great lengths to discover gold deposits. These discoveries come on a first come first serve basis.

Many of the most profitable gold mining companies have low market capitalizations with stock prices connected to volatile gold pricing. A continued rise in the spot price of gold fuels further shares increases. An astute investor knows that what goes up can come down. If gold prices fall, the shares of these companies will present an opportunity to short sellers. Competition in the gold mining business is high because of big players in a fragmented industry. Below are a few companies that have a large production base and can provide a comparison to SFEG.

Barrick Gold:

Barrick Gold Corporation is the largest gold mining company in the world, with its headquarters in Toronto, Canada. Barrick has five core mines that produce ounces at well below the industry average cost of production. The management has continued its focus on portfolio optimization, reduce CapEx and monetize non-core business streams. Its latest acquisition of Equinox has not paid off well and is only expected to work when the market prices of copper increase.

Figure 54: Barrick Gold Performance Overview

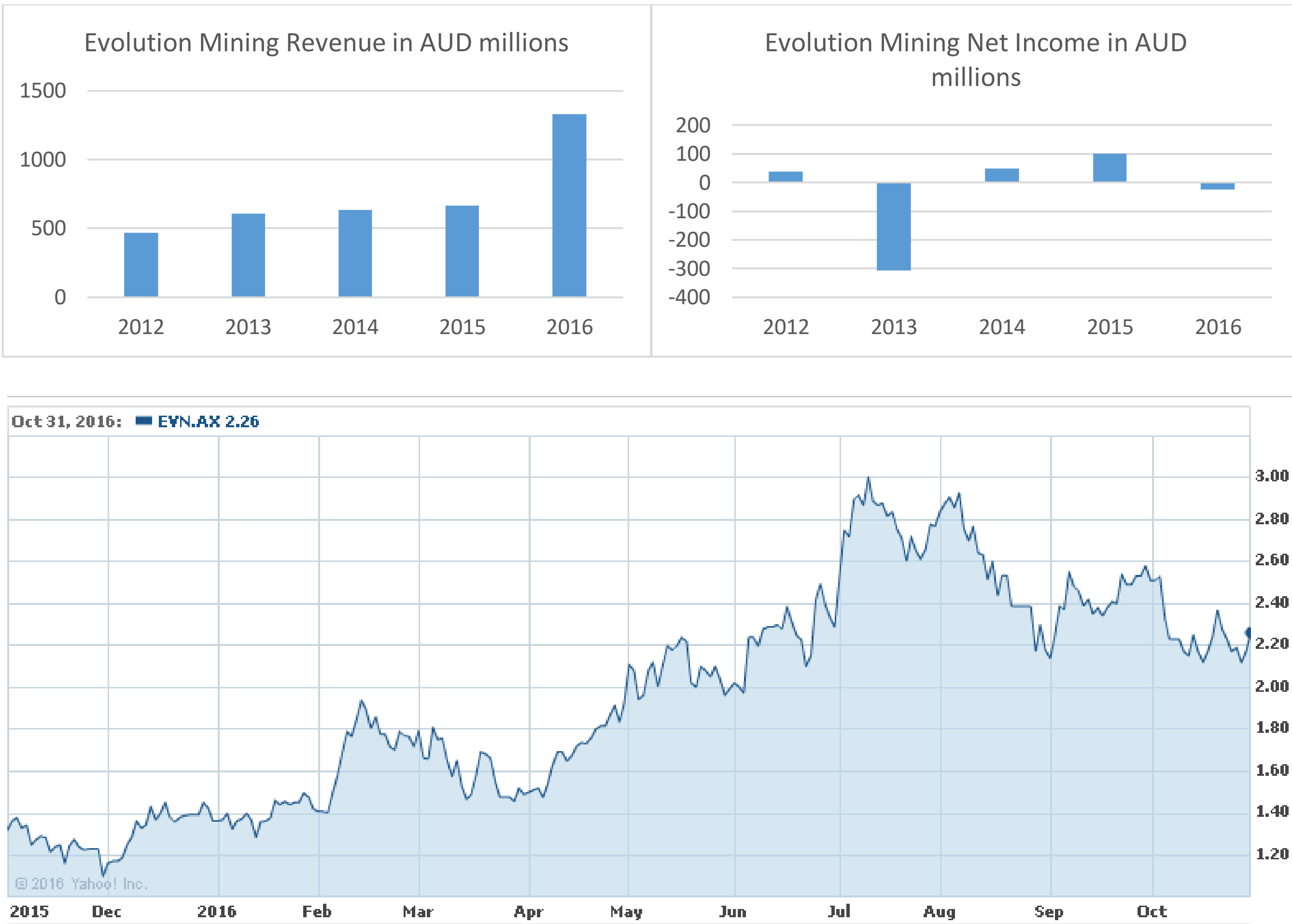


Source: Cohen Grassroots Research and Yahoo!

Evolution Mining

Evolution Mining Ltd is a gold exploration company with operations in Western Australia. It owns six gold mines. With the purchase of an economic interest in an asset, the Company is opening a different method of generating revenues from the mining industry. This method enables the Company to secure additional ounces without paying a premium and lower costs for the Company. On the downside, because the Company is expected to shift interest from gold mining to copper mining, Evolution's revenue may fall.

Figure 55: Evolution Mining Performance Overview

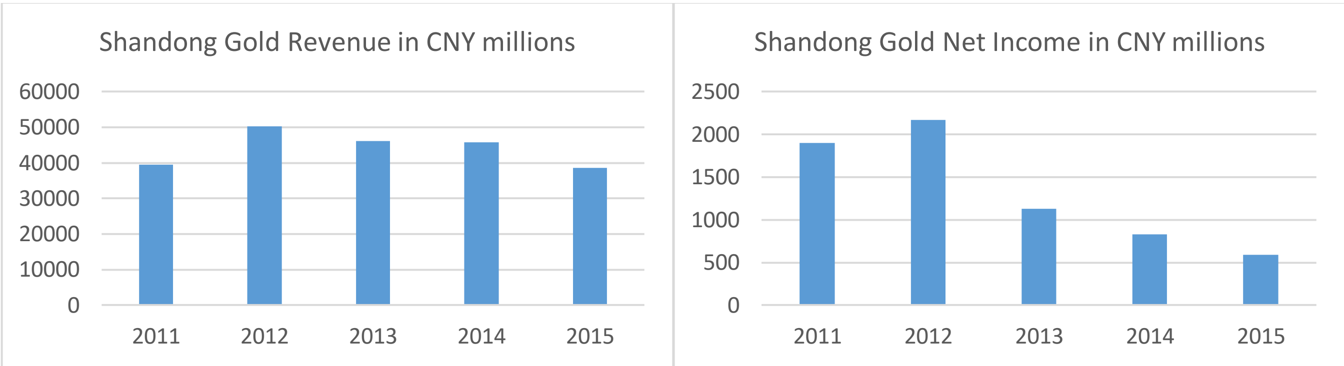


Source: Cohen Grassroots Research and Yahoo!

Shandong Gold Mining Co. Ltd.:

Shandong Gold Group is a Chinese state-owned enterprise. Shandong Gold reported positive numbers for their operating and net profit. These numbers are in line with market expectations. Despite operating in a similar market as Zhongjin, the Company's net profit is expected to grow by 70% compared to last year.

Figure 56: Shandong Gold Mining Performance Overview

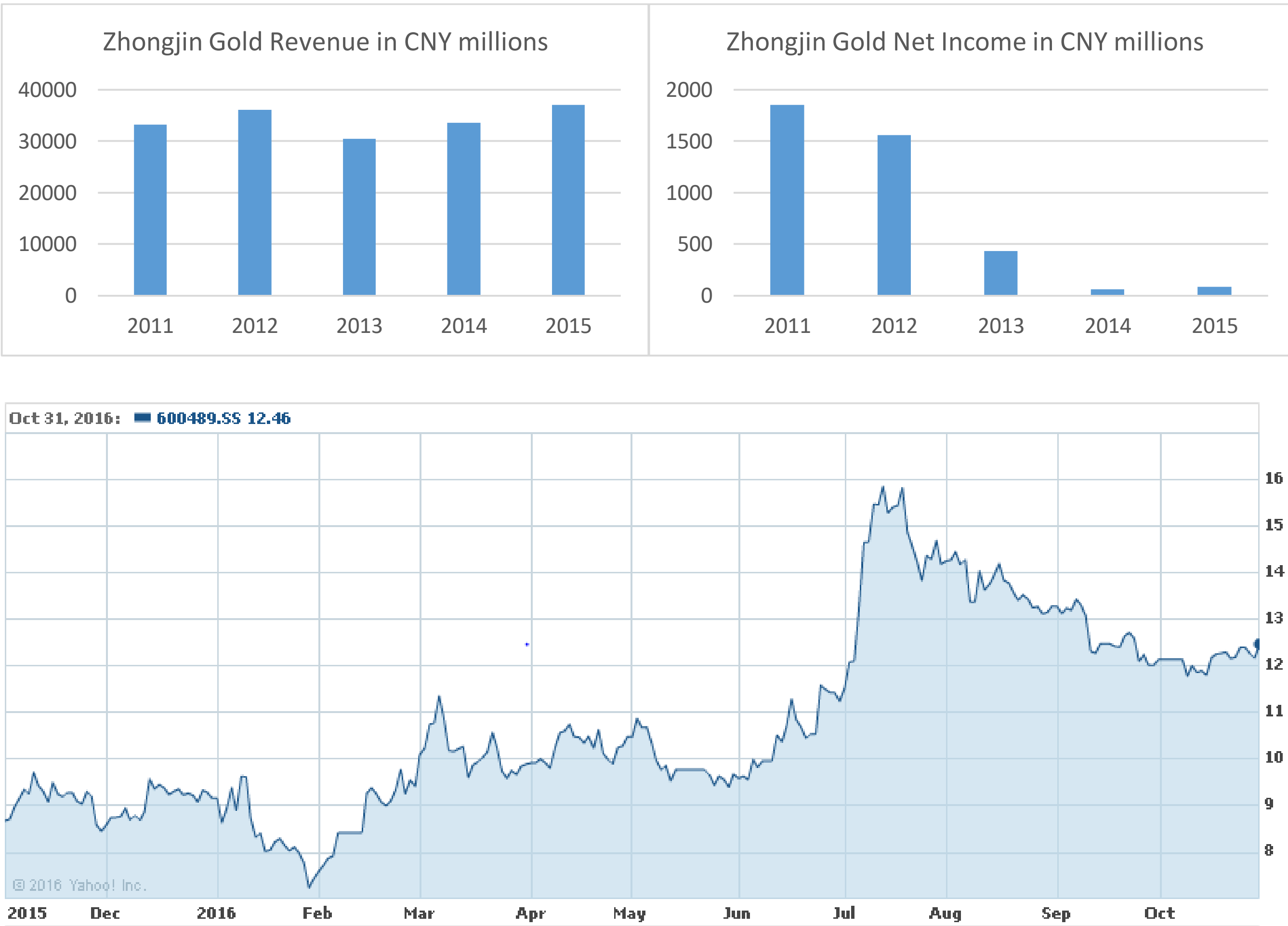


Source: Cohen Grassroots Research and Yahoo!

Zhongjin Gold Corp. Ltd.:

Located in Beijing, Zhongjin is China's largest gold producer with mines across the country. Zhongjin's Q2 results for 2016 have been better than market expectations. These expectations were based on marginal profits the Company was able to report for the past two years. Their operating cash flow turned positive for the first time since H1 2014. Their free cash flow became positive for the first time in three years.

Figure 57: Zhongjin Gold Performance Overview

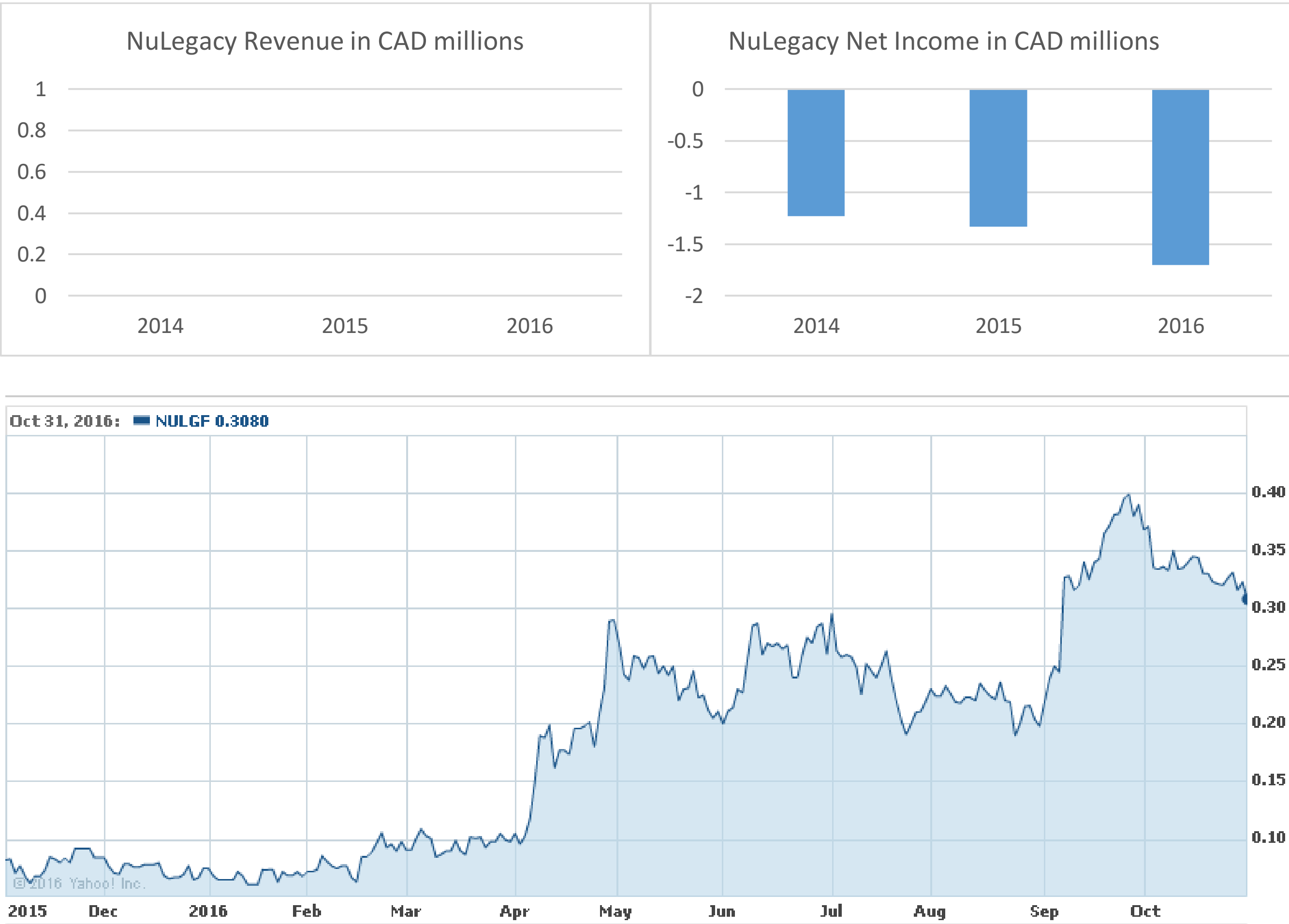


Source: Cohen Grassroots Research and Yahoo!

NuLegacy Gold Corporation

NuLegacy is a Nevada-based company focusing on the gold exploration. It is currently expanding its Carlin-style near-surface Iceberg oxide gold deposit on its Red Hill property located in the Cortez gold trend of Nevada. Its Iceberg gold deposit is similar to Barrack's multi-million-dollar deposit. Over its lifetime, the Company has set exploration targets and has managed its acquisitions accordingly. The Company's stock price was $0.10 in December 2015 and is now trading in the range of $0.30 - $0.35. SFEG is in a similar position to that of NuLegacy and could report a similar share price appreciation with its properties in Arizona and New Mexico.

Figure 58:NuLegacy Performance Overview



Source: Cohen Grassroots Research and Yahoo!

Figure 59: Gold Companies Comparison

Gold Companies	Rating	FX	Price Target	Share Price	Market Cap	EV (USD)
Acacia Mining PLC	EW	GBP	500	582	3112	3064
Anglogold Ashanti Lim	IW	ZAC	30000	26624	8086	8452
Alacer Gold Corp.	EW	AUD	3.75	3.43	761	750
Alamos Gold Inc	NA	CAD	NA	12	2392	2438
Barrick Gold Corp	EW	USD	20	21	24831	32046
Compania De Minas Buenaventura	EW	USD	11	16	3953	2568
Detour Gold Corp	NA	CAD	NA	34	4592	4838
Drdgold Limited	OW	ZAC	1000	1097	345	233
Gold Fields Limited	EW	ZAC	8000	8390	4824	5952
Goldcorp Inc	OW	USD	22	19	15667	17472
Agnico Eagle Mines Ltd	NA	CAD	NA	75	12987	13632
Dowa Holdings Co.,Ltd.	OW	JPY	690	631	1862	1671
Eldorado Gold Corp	NA	CAD	NA	5.45	3031	3644
Evolution Mining	OW	AUD	3.3	2.65	2983	2757
Franco-Nevada Corp	NA	CAD	NA	101	13867	13642
Harmony Gold Mining	UW	ZAC	5000	5762	1882	1534
Iamgold	NA	CAD	NA	6.27	2193	2277
Independence Group NL	EW	AUD	3.7	3.98	1566	1606
Kinross Gold Corporation	NA	CAD	NA	6.58	6356	7374
Medusa Mining Ltd	UW	AUD	1	0.67	107	92
Minera Frisco	NA	USD	NA	0.79	2004	3401
Newcrest Mining Ltd.	UW	AUD	22	25	14549	15706
NEW GOLD INC	NA	CAD	NA	7.38	2920	3485
Newmont Mining Corporation	EW	USD	41	44	23695	24311
Northern Star Resources	EW	AUD	5	4.77	2202	1850
Pan African Resources Ltd	OW	GBP	22	23	544	452
Pan African Resources Plc	OW	GBP	22	23	544	452
Perseus Mining Ltd	EW	AUD	0.7	0.55	425	361
Primero Mining Corp	NA	CAD	NA	2.32	296	398
Randgold	UW	GBP	6860	8585	10440	10448
Regis Resources Ltd	UW	AUD	3.05	4.14	1592	1317
Resolute Mining Inc.	OW	AUD	2	1.92	945	702
Royal Gold Inc	NA	USD	NA	83	5436	5996
Saudi Arabian Mining Company	UW	SAR	24	36	11286	27023
Shandong Gold Mining Ltd	EW	CNY	37	45	9595	10512
Sibanye Gold Limited	EW	ZAC	6000	6808	4643	4560
Sum itomo Metal Mining	EW	JPY	1150	1279	7895	3915
Yamana Gold Inc	NA	CAD	NA	7.07	5199	6764
Zhaojin Mining Industry	OW	HKD	9.25	9.01	3447	5308

Zijin Mining Group	UW	CNY	2.13	3.55	10639	16313
Zhongjin Gold Corp. Ltd.	OW	CNY	15	14	6928	7522
Centamin PLC	OW	GBP	160	177	2660	2303
Centerra	NA	CAD	NA	7.67	1440	1010
G-Resources Group Limited	NA	HKD	NA	0.13	464	332
Petropavlovsk	NA	GBP	NA	7.35	315	939
Polymetal International Plc	NA	GBP	NA	1190	6576	7873
Semafo Inc	NA	CAD	NA	6.7	1686	1611

Source: Mckinsey Global Metals and Mining Report – August 17, 2016. Stock prices are as of August 2016.

CONCLUSION

With the declaration of bankruptcy in 2015, Santa Fe Gold's share price has traded at the lows in the precious metals mining industry. However, with a new CEO heading a highly experienced and competent management team, the Company has turned around. SFEG is now positioned to become an exciting acquisition, growth and profitable business. The Company has acquired new properties having approximately $27 million worth of ore with significantly higher mine life than the Company's initial investment in Summit mines. Management has established a new structured plan to drive towards sustainable profitability in the short and the long term. The Company will be adding capacity to its assets and also has plans to capitalize on a solar farm.

The Company intends to add revenues by expanding its mining operation and processing mill. These additional revenues will be invested in improving technology, further exploration, and development of its existing assets. The focus on generating revenues as soon as possible and on the efficient use of capital will ensure that the Company has strong cash flows and higher profit margins.

Gold prices in 2016 have been 26% higher than in 2015. This increase has led to a 300%+ increase in the stock market price of certain gold mining stocks. The reason behind this increase is multifold. The steady demand from India and China for jewelry has become an investment vehicle. Central bank purchases by China and Russia as well as new demand from the global physical gold ETFs have been crucial in accelerating demand for a finite precious resource. Gold is a safe haven in times of geopolitical and economic turmoil. With clashes in Libya and Syria and the banking crisis in Europe as well as Brexit, gold has increased in price. Combined, these factors are likely to continue to drive gold prices higher in the short and long term. Santa Fe has positioned itself well to benefit from this long-term upswing in the prices of gold.

We believe the Company's new management team, the improving gold market price fundamentals, scalable business plan and growth potential make Santa Fe Gold an exciting investment proposition. The Company is an excellent investment opportunity for risk-averse investors for both the short-term and long-term time periods.

RS/Cohen Grassroots Research, Inc.

MANAGEMENT BIOS

The expert guidance of the management has enabled Santa Fe Gold to emerge from its voluntary bankruptcy and start building a strong portfolio of properties and revenue streams that will drive the Company forward.

Tom Laws, CEO

Mr. Laws is a mining analyst knowledgeable in metallurgy and mineralogy with over 40 years of experience in the mining industry.

Mr. Laws' mining career began in working a Placer Gold operation in Alaska. He then joined Phelps Dodge Corporation, at the time the world's largest copper company. His role was a Metals Accounting Specialist and Cost Analyst at the Hidalgo Smelter located in Playas, New Mexico. He later moved to the Tyrone Mine in Tyrone, New Mexico. Eventually, Mr. Laws returned to the Hidalgo Smelter in Playas, New Mexico as a controller.

Mr. Laws was then appointed to oversee costs and budget accounting at Chino Mines. He progressed to become a transaction specialist at Kennecott Mining. There he helped facilitate the Phelps Dodge Corporation purchase of Chino mines and related companies. After the transaction, Mr. Laws assumed accounting implementation and operational control of the Chino and Kennecott acquisitions for Phelps Dodge Corporation, now part of Freeport-McMoRan Inc., one of the World's largest Copper & Gold Miners.

Mr. Laws is intimately familiar with mining operations in the Southwestern United States and in particular the Arizona and New Mexico environs. With a large client base in New Mexico, Mr. Laws has worked with a number of mining companies up to the present, helping them to evaluate materials, economic utility and the most effective processing methods, looking to develop and optimize their mining output. His extensive area knowledge, broad experience and understanding of the local mineralogy in the mining districts of the Southwest, combined with his many years with Phelps Dodge and Kennecott, gives him a unique perspective on where the most coveted and valuable opportunities are known to exist and specialized knowledge of both large and small projects in the region, with special access and rights to some sizable ore deposits, infrastructure and mines in the area.

Frank G. Mueller, CFO

Frank G. Mueller joined Santa Fe Gold in June 2010 as Assistant Controller. Mr. Mueller has 20 years of experience in accounting and financial management. Prior to his employment with Santa Fe Gold, Mr. Mueller served for six years as the Senior Business Manager for two divisions of Cornell Company, a publicly traded organization. Mr. Mueller was responsible for financial reporting, revenues, budgeting, and inventory for 20 plus facilities in multiple states. Mr. Mueller holds a Bachelor of Science Degree in Business Administration, with Honors, from the University of Texas and a Master's Degree in Accounting from New Mexico State University.

ERICH HOFER, Chairman of the Board of Directors and President, Special Committee Chairman and Compensation Committee Chairman

Mr. Hofer will continue to serve as Chairman of the Board of Directors, Special Committee Chairman and Compensation Chairman. Mr. Hofer, who has served as Chairman of Santa Fe since October 2014 and interim CEO from May 6 2016 thru July 31 2016, has been involved in a wide array of corporate finance and strategic transactions. As principal of HFE MAC LLC since 2007, Mr. Hofer provides management and advisory services to public and private companies. Activities include evaluation of all facets of work flow, development of business models, restructuring finance and accounting processes, regulatory compliance and risk management.

Mr. Hofer has assumed key management roles for clients, several of which have been oil and gas companies. From 1999 to 2007, Mr. Hofer was CFO for three Swiss technology, manufacturing and energy management companies, and from 1995 to 1998 was financial controller for Zurich State Bank. He also served as Chief of Logistics, Colonel and a Member of General Staff in the Swiss Army. Mr. Hofer holds a MBA degree from the University of Chicago; and three degrees, including Master of Finance, Bachelor of Economics and Bachelor of Engineering from universities in Switzerland. He is fluent in four languages.

LATEST PRESS RELEASES

Santa Fe Gold Announces Engagement of International Monetary as its Investment Banking & Strategic Advisor

ALBUQUERQUE, N.M., Dec. 09, 2016 (GLOBE NEWSWIRE) -- Santa Fe Gold Corporation (OTC:SFEG), a U.S.-based mining and exploration enterprise with emphasis on Gold, Silver, Copper and industrial metals and owner of multiple claims, including the Malone Mines Complex incorporating 20 associated mine sites and in addition, the Playas Lake Bed area of Hidalgo County, New Mexico is pleased to retain International Monetary ("IM") as its Investment Banking & Strategic Advisory firm to provide capital resources, structure financing, proprietary investor relations services (IR), advice on maximizing growth and valuation, M&A advisory and counsel to the company's management on other strategic decisions.

"International Monetary ("IM") has a highly comprehensive direct connection to the investment community which will help us quickly move forward with our strategy," said Tom Laws, CEO of Santa Fe Gold. "Their vast experience and extensive reach will aid in our overall market support and depth, which is where we have needed additional exposure to Wall Street and the right kind of mining focused investors, overall marketplace and professional help and guidance in the past."

Tom Laws continued: "International Monetary is one of the premier investment banking and consulting firms in the United States, catering specifically to small capitalization public companies. With its team of accomplished professionals serving its corporate clients, IM has the broad experience and resources to quickly facilitate financing, deliver powerful investor awareness services, tactical advisory, and bring a substantial knowledgebase to the table for strategic decision making with strong emphasis on growth".

"We are delighted to be associated with this premier Investment Banking firm in this industry at this exciting time for Santa Fe."

MB Riley, Managing Director of IM, states, "Santa Fe Gold represents a compelling and dynamic growth opportunity in the emerging mining sector, positioning the Company for significant expansion. With all-time record gold investments in 2016 and a rapidly recovering precious and base metals industry, the target market broadens each day in the U.S. and around the world."

Newport Beach-based International Monetary will provide Santa Fe Gold with a complete suite of services ranging from the preparation of corporate documents to providing advice, guidance and dedicated assistance in maximizing shareholder value.

Santa Fe Gold Acquires Significant Holdings in the Playas Lake Bed Area of Hidalgo County, New Mexico

ALBUQUERQUE, N.M., Nov. 01, 2016 (GLOBE NEWSWIRE) -- Santa Fe Gold Corporation (OTC: SFEG), a U.S.-based mining and exploration enterprise with emphasis on Gold, Silver, Copper and Industrial Metals and owner of multiple claims, including the Malone Mines and some 20 associated mine sites, is pleased to announce the acquisition of significant holdings in the Playas Lake Bed Area of Hidalgo county.
This acquisition represents an area three times the size of its recent Malone Mines acquisition and adds to the near term potential for Santa Fe Gold as it prepares for renewal of production and processing operations expected to

begin in the near future. It is also circa-contiguous to the recent substantial acquisitions by BHP and Rio Tinto of some 20 square miles nearby.

The Playas is an area the Santa Fe Gold Exploration and Acquisitions team have been exploring for several years, is a dry lake bed, about five miles west of Lordsburg, encompassing in excess of 50 square miles. It is flat and unencumbered, easily accessible from the major artery, I-10, headed west toward Tucson from Lordsburg. The lake has been the repository of all the run-off, streams, etc., from the Burro Mountains (the same area as our Malone mine complex) for generations.

As a consequence, the mineral content is rich and diverse as part of the polymorphic veins identified through the area, including concentrations of Gold, Silver, Platinum, Palladium and Copper along with a number of distinct other metals.

An additional component of potential high value in this location is the presence of multiple 'Rare Earths', including notably high percentages of Ferro Titanium, Titanium Ore and other Titanium derivatives. Titanium is a highly valued metal with numerous high technology and aerospace applications and currently sells for about $2,000 per ton.

The ore we would be reclaiming is basically surface recovery, running to a depth of about 30 feet and particularly because if its 'Rare Earth' components is deemed be of high potential.

According to the US Geological Survey, New Mexico has the highest concentration of Rare Earths in the US. Rare Earths are becoming increasingly scarce and yet demand continues to soar against a backdrop of China's market stranglehold and near total Rare Earth domination, as well as extremely tight market conditions worldwide and low rare earth production in the US.

With already one million electric cars on the road and 2.2 million expected to be sold globally by 2020, up from 460,000 in 2016, demand for Copper and increasing varieties of specialist metals and Rare Earths is expected to soar to new heights.

CEO Tom Laws added: This is an area conducive to Placer recovery of precious and exotic metals which can be brought into production, relatively quickly, easily and inexpensively and could also be scaled up to produce substantial output in time from areas with high concentrations and the entire area, even at these relatively shallow depths could hold millions of tons of valuable ores with variable content.

We look forward to announcing additional acquisitions in the very near future as part of our plan to transform Santa Fe Gold into a vibrant precious metals production entity, intent on building value through acquisition and development of properties.

The company is also expecting to announce its 2014 - 16 financials beginning later this month.

Santa Fe Gold Quadruples The Size Of Its Malone Mines Area Holdings

ALBUQUERQUE, N.M., Nov. 10, 2016 (GLOBE NEWSWIRE) -- Santa Fe Gold Corporation (SFEG), a U.S.-based mining and exploration enterprise with emphasis on Gold, Silver, Copper and industrial metals and owner of multiple claims, including the Malone Mines and some 20 associated mine sites and in addition, the Playas Lake Bed area of Hidalgo County, New Mexico, is pleased to announce additional acquisitions surrounding the Malone Mines, almost quadrupling its holdings in that area, as it prepares for renewal of production and processing operations, expected to begin in the near future.

Just over a week ago, November 1, Santa Fe Gold commented on the importance of industrial metals, including Gold, Silver, Copper and Titanium and their increasing relevance to the dynamic new world of High Technology, Aerospace and the Internet of Things.

That same day, the world's largest miner, BHP, announced: "Why Electric Cars Excite the World's Biggest Mining Company."

It turned bullish on the red metal, stating it liked copper, because of its increasingly predominant use in all electric vehicles.

Since October 24, copper prices have soared a spectacular 24% and prospects never looked better for the coming years as 'The Internet of Things', 'Electric cars' and 'New Technologies' look set to transform the copper market into a whole new super high demand scenario.

On November 1, BHP made this historic pronouncement: “EVs at the moment have about 80 kilograms of copper in them. As they become more efficient, you will see a greater amount of copper in those vehicles, so there's always upside for copper.”

According to BHP, production of Electric Vehicles is expected to reach 40 million units by 2040, as EVs begin to experience exponential growth over coming decades. Given the magnitude of such powerful numbers, it's not hard to see why copper suddenly took off on a massive upswing, signaling a bright new era for copper prices, further buoyed by the U.S. election.

Since Arizona and New Mexico are the major epicenters of copper production in the US, it is no surprise that, following Santa Fe Gold's discovery of a potentially huge copper deposit near Lordsburg two years ago, in a rare move, both BHP and Rio Tinto immediately acquired some 20 square miles of territory surrounding Santa Fe's discovery. These areas are notably close to Santa Fe's recent new acquisitions and its strong emphasis on this very rich area is reminiscent of a familiar mining adage:

You find copper in proven copper country and gold in epic gold country, especially with notably high grade producing seams:

The Knight's Peak area and surrounding terrain of the Burro Mountains is true 'high grade gold territory', with some 80% of all the gold discovered to date in New Mexico having come from this area. That is the reason Santa Fe has already put so much emphasis on the Malone Mines and its surrounding areas with renewed promise of such significant upside potential.

The area has yielded abundant gold and as the recently published Reuters Mining Article highlighted below implies, is reason enough to prospect for more gold there. It is also said that the profiles of many gold and copper mines are a lot like icebergs:

What's near the surface often belies what's beneath. That could also apply to the Malone Mines area, where some 20 mines over a great many number of years, reportedly yielded some truly amazing gold grades that by any measure were quite exceptional at upwards of 16 oz per ton. While these grades were unusually high, they enabled sensational revenues per ton, and also point to a concentration of numerous seams culminating in various faults that suggest additional gold potential.

For this reason, Santa Fe Gold is today announcing a near quadrupling of its position surrounding the Malone Mines complex.

Beyond conventional surface mining, what lies beneath may not only go a long way down, but could open up a whole new mining opportunity and the prospect of some great new discoveries for Santa Fe Gold. Many of the world's largest discoveries were made this way, where quite often initial estimates were just an indication of what came to be massive new discoveries.

Such a discovery occurred decades ago with the world's largest gold and copper mine: The huge Grasberg Mine in Indonesia, initially a million ounce gold discovery: Over decades, not only came to produce millions of ounces of Gold per year, but also millions of tons of copper and continues to do so, from a near 'bottomless pit' in a high yielding mountainous region.

While not quite as high or dramatic, the Knight's Peak and Malone Mines areas in the Burro Mountains are also high yielding mines, as are many other mountainous areas worldwide and also come with some 500,000 tons of potentially high grade mine tailings, ready for reprocessing and should be relatively easy to add to Santa Fe production operations as they resume.

Santa Fe Gold's new strategy to avail of the current asset rich environment and build value by acquiring the best high value quality properties with significant production potential, is encapsulated in a recent article published by Reuters 'Mining Gold':

It highlighted the lack of any really major new deposits and discoveries being made that are necessary to maintain long term production of gold and silver. This is a major reason prices will likely rise in coming years, in part, due to record investment demand in 2016, together with central bank purchases of 271 tons of gold to date, along with increasing shortages of mined gold, as future demand for gold continues to soar worldwide and output declines by an estimated to be 9% over the next three years.

Top producers are relying more than ever on "small companies" to do the 'heavy lifting' of searching for new deposits and they are increasingly taking 10 to 20 percent equity stakes in the junior miners that succeed in acquiring sought after assets.

Several leading companies in the emerging gold mining sector have done exactly that and the most ambitious have achieved already monumental gains in assets and values and are already being eyed by majors. This is a trend that will likely continue and ultimately lead to mergers and acquisitions of an increasing numbers of successful emerging miners in years ahead.

This is the authentication of Santa Fe Gold's new value building acquisition strategy as outlined in its recent announcements:

Santa Fe Gold's Exploration and Acquisition Team is intimately familiar in identifying diverse known deposits, 'close to home', because it has the background data and relationships to acquire them more easily and has exclusive, proprietary knowledge of the region as to where the most prospective targets are known to exist and are available. With the overall strategy to continue to build definitive tangible value and acquire additional highly prospective territories on a planned ongoing basis:

The company aims to rebuild value for shareholders, through continuous, contiguous and sequential asset procurements and organic growth: Its anticipated series of planned acquisitions is centered around the additional major benefit of near term production, possibly from several sources, therein differentiating itself from most other emerging miners. The company is already intensely focused on potentially monetizing several extremely coveted assets already under its control, which are expected to be announced in the near future.

As if to be echoing, if not endorsing Santa Fe Gold's approach outlined above as well as its previously professed strategy and commitment to rebuilding the company, the Reuters "Mining Article" went on to say:

"Exploring close to home is more cost efficient and improves the odds of discoveries. It only makes sense to be looking in your own back yard first and around existing sites, before exploring elsewhere."

This is the Santa Fe model exactly. It is precisely the strategy that Santa Fe Gold has been executing on, is ongoing and will continue to do so methodically.

To add further credence, the article went on to quote:

"They say the best place to discover a mine is in the shadow of a head frame" of a mine that is already in existence

This personifies the Malone Mines acquisition and the strategy Santa Fe Gold has outlined and is fulfilling, with compelling reasoning and logic for what today is its expansion of Malone, which it sees as having high near term production potential.

As previously reported, the other persuasive reasoning for expanding the area Santa Fe already has under its control, is the fact that, not too far from Malone Mines and Knight's Peak, the two largest miners in the world, namely BHP and Rio Tinto, on the very same day, both staked a huge amount of territory equaling some 20 square miles, in a highly unusual competitive move. With today's developments and future prospects for copper, their actions resulted from reaching the same conclusions as are now highlighted above with BHP's EV announcement. These two companies wanted to secure any potential copper or gold bearing region for the longer term as prices recover, which is the same reasoning behind Santa Fe's acquisition strategy.

KEY HISTORICAL DEVELOPMENTS

Santa Fe Gold Corp Issues Update on its Acquisition of Malone, Patanka, Hillcrest, Barranca and Principal Mines incorporating some 20 Mine Sites

ALBUQUERQUE, N.M., Oct. 19, 2016 (GLOBE NEWSWIRE) -- Santa Fe Gold Corporation (OTC:SFEG), a U.S.-based mining and exploration enterprise with emphasis on Gold, Silver, Copper and owner of multiple claims, which include the Malone Mines and some 20 associated mine sites, is pleased to announce additional plans as part of its renewal of production and processing operations expected to begin soon.

Santa Fe Gold Corp Announces the Acquisition of the historic Malone, Patanka, Hillcrest, Barranca and Principal Mines & 10 other Mine Sites

ALBUQUERQUE, N.M., Sept. 29, 2016 (GLOBE NEWSWIRE) -- Santa Fe Gold Corporation (OTCBB:SFEG) is pleased to announce additional plans as part of its renewal of production and processing operations.

Anticipated to begin soon, plans include acquisitions of all available unexploited areas, as well as The Malone Mines, Patanka, Hillcrest, Barranca and Principal Mines, all within the Knight's Peak region: An area known to include numerous high grade gold and silver deposits and estimated to hold upwards of 15,000,000 tons of conventional high grade ores and notably higher grade gold veins. This series of asset acquisitions, to secure long term ore supplies, should provide ample feed for Santa Fe Gold's renewal of production operations.

Santa Fe Gold Corp Announces The Engagement of MaloneBailey, LLP as Accountant and Auditor

ALBUQUERQUE, N.M., Sept. 15, 2016 (GLOBE NEWSWIRE) -- Santa Fe Gold Corporation (OTCBB:SFEG) is pleased to announce today the engagement of MaloneBailey, LLP a Certified Public Accounting Firm as Auditors, in order to bring its financials immediately up to date and continue as the company's new accounting firm and auditors.

Santa Fe Gold Announces the Appointment of CEO

ALBUQUERQUE, N.M., Aug. 01, 2016 (GLOBE NEWSWIRE) -- Santa Fe Gold Corporation (OTCBB:SFEG) is pleased to announce the appointment of Mr. Tomas Laws as CEO of the company.

Mr. Laws is a mining analyst knowledgeable in metallurgy and minerology with over 40 years of experience in the mining industry.

Santa Fe Gold Announces Completion of Financials with Final Audit Expected Soon

ALBUQUERQUE, N.M., July 22, 2016 (GLOBE NEWSWIRE) -- Santa Fe Gold Corporation (OTCBB:SFEG) announces today that company financials have been updated. The results are currently being audited. Upon review, completion and approval of the audit, Santa Fe Gold will file the results. This action will bring the company's filing requirements up to date. Financial statements and attendant information will be distributed through normal channels and news outlets. In the near future, we look forward to releasing our ambitious new plans through a series of announcements. The intention of these bold initiatives is to rebuild and grow longer term value of Santa Fe Gold.

Santa Fe Gold Emerges from the Voluntary Petition Under Chapter 11 of the Bankruptcy Code

ALBUQUERQUE, New Mexico, June 28, 2016 /PRNewswire/ --

Santa Fe Gold Corporation (OTCBB: SFEG) is pleased to announce today that it has successfully emerged from the voluntary petitions under Chapter 11 of the Bankruptcy Code in U.S. Bankruptcy Court for the District of Delaware (the "Court"). Pursuant to dismissal from bankruptcy, the 'Q' is expected to be removed from the SFEGQ interim trading symbol forthwith and Santa Fe Gold will resume trading under SFEG.

Santa Fe Gold Cancels Ch. 11 Auction, Names Waterton Buyer

Law360, Wilmington (January 25, 2016, 8:29 PM EST) -- Santa Fe Gold Corp. told a Delaware bankruptcy judge Monday that it canceled its auction and deemed stalking horse bidder and prepetition lender Waterton Global Value LP the proposed buyer, but must still work out opposition from unsecured creditors over the credit bid and how value will be distributed

Santa Fe Gold Seeks More Ch. 11 Plan Time As Sale Nears

Law360, Wilmington (December 23, 2015, 9:46 PM EST) -- Precious metals miner Santa Fe Gold sought extended Delaware Bankruptcy Court protection from competing Chapter 11 plans on Wednesday as the company moves toward a hearing on a scheduled auction of its assets next month.

Santa Fe Gold Files Voluntary Petition Under Chapter 11 of the Bankruptcy Code

LORDSBURG, New Mexico, August 27, 2015 /PRNewswire/ -- Santa Fe Gold Corporation (OTCBB: SFEG) announced that, today, it and three of its subsidiaries, filed voluntary petitions under Chapter 11 of the Bankruptcy Code in U.S. Bankruptcy Court for the District of Delaware (the "Court").

FINANCIAL EXHIBITS

Income Statement – Base Case

all figures in $ million	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Revenues	**0.06**	**25.66**	**102.66**	**118.05**	**129.86**	**136.35**	**143.17**	**150.33**	**157.85**
Total Cost of Goods Sold	0.04	16.04	64.16	73.78	81.16	85.22	89.48	93.96	98.65
Gross Profit	**0.02**	**9.62**	**38.50**	**44.27**	**48.70**	**51.13**	**53.69**	**56.37**	**59.19**
Expenses									
Selling, General and Admin Exper	**3.25**	4.23	5.59	9.79	14.68	18.35	21.10	24.27	27.91
Total Expenses	**3.25**	**4.23**	**5.59**	**9.79**	**14.68**	**18.35**	**21.10**	**24.27**	**27.91**
Operating Profit/ EBITDA	**(3.23)**	**5.40**	**32.90**	**34.48**	**34.02**	**32.78**	**32.58**	**32.10**	**31.28**
Depreciation and Amortization	1.98	4.70	4.95	5.20	5.45	5.70	5.95	6.20	6.45
Earnings Before Interest and T	**(5.21)**	**0.70**	**27.95**	**29.28**	**28.57**	**27.08**	**26.63**	**25.90**	**24.83**
Interest Expense, Net	1.57	0.01	0.40	0.41	0.45	0.48	0.50	0.53	0.55
Other Costs	1.09	-	-	-	-	-	-	-	-
Profit Before Tax	**(7.87)**	**0.69**	**27.56**	**28.87**	**28.11**	**26.60**	**26.13**	**25.38**	**24.28**
Taxation Expenses (Recovery)	-	-	-	-	-	7.98	9.15	8.88	8.50
Net Profit/Loss for the period	**(7.87)**	**0.69**	**27.56**	**28.87**	**28.11**	**18.62**	**16.99**	**16.50**	**15.78**
Shares Outstanding - Basic	144.6	644.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6
Shares Outstanding - Diluted	144.6	644.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6
EPS - Basic	(0.0544)	0.0011	0.0415	0.0434	0.0423	0.0280	0.0256	0.0248	0.0237
EPS - Diluted	(0.0544)	0.0011	0.0415	0.0434	0.0423	0.0280	0.0256	0.0248	0.0237

Balance Sheet – Base Case

all figures in $ million	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
ASSETS									
Cash and Cash Equivalents	0.40	0.27	1.35	25.84	59.33	81.38	101.28	121.50	141.34
Accounts Receivable	-	3.85	15.40	17.71	16.23	17.04	17.90	18.79	19.73
Prepaids and Other Current Asset	0.33	0.21	0.28	0.49	0.73	0.92	1.06	1.21	1.40
Inventory	-	0.80	3.21	3.69	4.06	4.26	4.47	4.70	4.93
Total Current Assets	**0.73**	**5.13**	**20.24**	**47.73**	**80.35**	**103.60**	**124.70**	**146.20**	**167.40**
Property, Plant and Equipment, Gross	32.00	47.00	49.50	52.00	54.50	57.00	59.50	62.00	64.50
Accumulated Depreciation	15.10	19.80	24.75	29.95	35.40	41.10	47.05	53.25	59.70
Property, Plant and Equipment, Net	16.90	27.20	24.75	22.05	19.10	15.90	12.45	8.75	4.80
Mineral Properties	0.60	0.60	1.10	1.10	1.60	1.60	2.10	2.10	2.10
Net Additions	0.60	-	0.50	-	0.50	-	0.50	-	-
Other Non-Current Assets	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Net Additions	0.30	-	-	-	-	-	-	-	-
Total Assets	**18.22**	**32.93**	**46.09**	**70.88**	**101.05**	**121.10**	**139.25**	**157.05**	**174.30**
LIABILITIES									
Accounts Payable & Liabilities	14.63	21.13	6.99	2.45	3.67	4.59	5.28	6.07	6.98
Other Short term Liabilities	3.36	0.21	0.28	0.49	0.73	0.92	1.06	1.21	1.40
Short Term Debt	13.02	8.98	5.65	5.90	6.49	6.82	7.16	7.52	7.89
Total Current Liabilities	**31.00**	**30.32**	**12.92**	**8.84**	**10.90**	**12.32**	**13.49**	**14.80**	**16.27**
Long Term Debt	0.30	-	-	-	-	-	-	-	-
Total Liabilities	**31.30**	**30.32**	**12.92**	**8.84**	**10.90**	**12.32**	**13.49**	**14.80**	**16.27**
Preferred Stock	-	-	-	-	-	-	-	-	-
Common Stock	0.29	1.29	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Additional Capital	80.50	94.50	97.46	97.46	97.46	97.46	97.46	97.46	97.46
Retained Earnings	(93.85)	(93.16)	(65.61)	(36.74)	(8.63)	10.00	26.98	43.48	59.26
Total Shareholders Equity	**(13.07)**	**2.62**	**33.18**	**62.05**	**90.16**	**108.78**	**125.77**	**142.27**	**158.05**
Total Liabilities and Shareholders Equity	**18.23**	**32.94**	**46.10**	**70.89**	**101.06**	**121.11**	**139.26**	**157.06**	**174.31**

Cash Flow Statement – Base Case

all figures in $ million		2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Operating Activity									
Net Income		0.69	27.56	28.87	28.11	18.62	16.99	16.50	15.78
Adjustments to Reconcile Cash Flows									
Depreciation and Amortization		4.70	4.95	5.20	5.45	5.70	5.95	6.20	6.45
Other Adjustments		-	-	-	-	-	-	-	-
Changes in operating assets and liabilities:									
Accounts receivable		(3.85)	(11.55)	(2.31)	1.48	(0.81)	(0.85)	(0.89)	(0.94)
Prepaids and Other Current Assets		0.11	(0.07)	(0.21)	(0.24)	(0.18)	(0.14)	(0.16)	(0.18)
Inventory		(0.80)	(2.41)	(0.48)	(0.37)	(0.20)	(0.21)	(0.22)	(0.23)
Accounts payable		6.50	(14.13)	(4.54)	1.22	0.92	0.69	0.79	0.91
Accrued liabilities		(3.15)	0.07	0.21	0.24	0.18	0.14	0.16	0.18
Other liabilities		(4.03)	(3.34)	0.26	0.59	0.32	0.34	0.36	0.38
Change in Working Capital		(5.22)	(31.43)	(7.08)	2.92	0.23	(0.04)	0.03	0.11
Cash Flow from Operating Activities		**0.17**	**1.08**	**26.99**	**36.48**	**24.55**	**22.90**	**22.73**	**22.34**
Investing Activity									
Expenditures for property, plant and equipment		(15.00)	(2.50)	(2.50)	(2.50)	(2.50)	(2.50)	(2.50)	(2.50)
Other Long-term assets		-	(0.50)	-	(0.50)	-	(0.50)	-	-
Cash Flow from Investing Activities		**(15.00)**	**(3.00)**	**(2.50)**	**(3.00)**	**(2.50)**	**(3.00)**	**(2.50)**	**(2.50)**
Financing Activity									
Proceeds from or repayment of debt		(0.30)	-	-	-	-	-	-	-
Proceeds from issuance of common stock		15.00	3.00	-	-	-	-	-	-
Cash Flow from Financing Activities		**14.70**	**3.00**	**-**	**-**	**-**	**-**	**-**	**-**
Effect of Foreign Exchange		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Net Change in Cash		**(0.13)**	**1.08**	**24.49**	**33.48**	**22.05**	**19.90**	**20.23**	**19.84**
Opening Cash Balance		**0.40**	**0.27**	**1.35**	**25.84**	**59.33**	**81.38**	**101.28**	**121.50**
Ending Cash Balance	**0.40**	**0.27**	**1.35**	**25.84**	**59.33**	**81.38**	**101.28**	**121.50**	**141.34**

Summary Sheet – Base Case

Profitability Metrics	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Operating Margin	NM	39%	37%	34%	30%	28%	27%	25%	24%
Pre Tax Profit Margin	-12298%	3%	27%	24%	22%	20%	18%	17%	15%
Net Profit Margin	NM	3%	27%	24%	22%	14%	12%	11%	10%
Interest Coverage	(3.32)	65.71	71	71	63	57	53	49	45
Tax Rate	0%	0%	0%	0%	0%	30%	35%	35%	35%

Performance Metrics	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Return on Equity (ROE)	NA	26%	83%	47%	31%	17%	14%	12%	10%
Return on Assets (ROA)	-43%	2%	60%	41%	28%	15%	12%	11%	9%
Return on Invested Capital (ROI)	62%	26%	83%	47%	31%	17%	14%	12%	10%

Per Share Data	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Sales per Share	0.00	0.04	0.15	0.18	0.20	0.21	0.22	0.23	0.24
Cash per Share	0.00	0.00	0.00	0.04	0.09	0.12	0.15	0.18	0.21
Current Assets per Share	0.01	0.01	0.03	0.07	0.12	0.16	0.19	0.22	0.25
Total Assets per Share	0.13	0.05	0.07	0.11	0.15	0.18	0.21	0.24	0.26
Tangible Book Value per Share	0.13	0.05	0.07	0.11	0.15	0.18	0.21	0.24	0.26
Long Term Debt - per Share	0.22	0.05	0.02	0.01	0.02	0.02	0.02	0.02	0.02
Working Capital per Share	(0.21)	(0.04)	0.01	0.02	0.02	0.01	0.01	0.01	0.01
Free Cash Flow per Share	0.17	(0.02)	(0.00)	0.04	0.05	0.03	0.03	0.03	0.03

Price/ Earnings	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Price Earnings Ratio - Closing Price	(0.81)	41.48	1.07	1.02	1.05	1.58	1.73	1.78	1.87
Price to Sales Ratio - Closing Price	100.07	0.25	0.06	0.05	0.05	0.05	0.04	0.04	0.04

Valuation Metrics	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Price to Sales	100.07	0.25	0.06	0.05	0.05	0.05	0.04	0.04	0.04
Price to Book Value	0.35	0.19	0.14	0.09	0.06	0.05	0.05	0.04	0.04
Price to Cash Flow	NA	37.86	5.91	0.24	0.18	0.26	0.28	0.28	0.29
Price to Free Cash Flow	NA	(0.43)	(4.21)	0.26	0.19	0.29	0.32	0.31	0.32
Price Earnings Ratio - Closing Price	(0.81)	41.48	1.07	1.02	1.05	1.58	1.73	1.78	1.87

Income Statement – Optimistic Case

all figures in $ million	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Revenues	**0.06**	**27.26**	**115.87**	**133.25**	**146.58**	**153.91**	**161.60**	**169.68**	**178.17**
Total Cost of Goods Sold	0.04	17.04	72.42	83.28	91.61	96.19	101.00	106.05	111.35
Gross Profit	**0.02**	**10.22**	**43.45**	**49.97**	**54.97**	**57.72**	**60.60**	**63.63**	**66.81**
Expenses									
Selling, General and Admin Exper	**3.25**	4.23	5.59	9.79	14.68	18.35	21.10	24.27	27.91
Total Expenses	**3.25**	**4.23**	**5.59**	**9.79**	**14.68**	**18.35**	**21.10**	**24.27**	**27.91**
Operating Profit/ EBITDA	**(3.23)**	**6.00**	**37.86**	**40.18**	**40.29**	**39.36**	**39.50**	**39.36**	**38.90**
Depreciation and Amortization	1.98	4.70	4.95	5.20	5.45	5.70	5.95	6.20	6.45
Earnings Before Interest and T	**(5.21)**	**1.30**	**32.91**	**34.98**	**34.84**	**33.66**	**33.55**	**33.16**	**32.45**
Interest Expense, Net	1.57	0.01	0.45	0.47	0.51	0.54	0.57	0.59	0.62
Other Costs	1.09	-	-	-	-	-	-	-	-
Profit Before Tax	**(7.87)**	**1.29**	**32.46**	**34.52**	**34.32**	**33.12**	**32.98**	**32.57**	**31.83**
Taxation Expenses (Recovery)	-	-	-	-	-	9.94	11.54	11.40	11.14
Net Profit/Loss for the period	**(7.87)**	**1.29**	**32.46**	**34.52**	**34.32**	**23.19**	**21.44**	**21.17**	**20.69**
Shares Outstanding - Basic	144.6	644.6	644.6	644.6	644.6	644.6	644.6	644.6	644.6
Shares Outstanding - Diluted	144.6	644.6	644.6	644.6	644.6	644.6	644.6	644.6	644.6
EPS - Basic	(0.0544)	0.0020	0.0504	0.0535	0.0532	0.0360	0.0333	0.0328	0.0321
EPS - Diluted	(0.0544)	0.0020	0.0504	0.0535	0.0532	0.0360	0.0333	0.0328	0.0321

Balance Sheet – Optimistic Case

all figures in $ million	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
ASSETS									
Cash and Cash Equivalents	0.40	1.14	2.19	32.00	71.91	98.44	122.70	147.50	172.14
Accounts Receivable	-	4.09	17.38	19.99	18.32	19.24	20.20	21.21	22.27
Prepaids and Other Current Asset	0.33	0.21	0.28	0.49	0.73	0.92	1.06	1.21	1.40
Inventory	-	0.85	3.62	4.16	4.58	4.81	5.05	5.30	5.57
Total Current Assets	**0.73**	**6.29**	**23.47**	**56.64**	**95.55**	**123.40**	**149.00**	**175.22**	**201.38**
Property, Plant and Equipment, Gross	32.00	47.00	49.50	52.00	54.50	57.00	59.50	62.00	64.50
Accumulated Depreciation	15.10	19.80	24.75	29.95	35.40	41.10	47.05	53.25	59.70
Property, Plant and Equipment, Net	16.90	27.20	24.75	22.05	19.10	15.90	12.45	8.75	4.80
Mineral Properties	0.60	0.60	1.10	1.10	1.60	1.60	2.10	2.10	2.10
Other Non-Current Assets	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Total Assets	**18.22**	**34.09**	**49.32**	**79.79**	**116.25**	**140.90**	**163.55**	**186.07**	**208.28**
LIABILITIES									
Accounts Payable & Liabilities	14.63	21.13	6.99	2.45	3.67	4.59	5.28	6.07	6.98
Other Short term Liabilities	3.36	0.21	0.28	0.49	0.73	0.92	1.06	1.21	1.40
Short Term Debt	13.02	9.54	6.37	6.66	7.33	7.70	8.08	8.48	8.91
Total Current Liabilities	**31.00**	**30.88**	**13.64**	**9.60**	**11.73**	**13.20**	**14.41**	**15.77**	**17.28**
Long Term Debt	0.30	-	-	-	-	-	-	-	-
Total Liabilities	**31.30**	**30.88**	**13.64**	**9.60**	**11.73**	**13.20**	**14.41**	**15.77**	**17.28**
Preferred Stock	-	-	-	-	-	-	-	-	-
Common Stock	0.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Additional Capital	80.50	94.50	94.50	94.50	94.50	94.50	94.50	94.50	94.50
Retained Earnings	(93.85)	(92.56)	(60.10)	(25.59)	8.74	31.92	53.36	74.53	95.22
Total Shareholders Equity	**(13.07)**	**3.22**	**35.68**	**70.20**	**104.52**	**127.71**	**149.15**	**170.32**	**191.00**
Total Liabilities and Shareholders Equity	**18.23**	**34.10**	**49.33**	**79.80**	**116.26**	**140.91**	**163.56**	**186.08**	**208.29**

Cash Flow Statement – Optimistic Case

all figures in $ million		2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Operating Activity									
Net Income		1.29	32.46	34.52	34.32	23.19	21.44	21.17	20.69
Adjustments to Reconcile Cash Flows									
Depreciation and Amortization		4.70	4.95	5.20	5.45	5.70	5.95	6.20	6.45
Other Adjustments		-	-	-	-	-	-	-	-
Changes in operating assets and liabilities:									
Accounts receivable		(4.09)	(13.29)	(2.61)	1.67	(0.92)	(0.96)	(1.01)	(1.06)
Prepaids and Other Current Assets		0.11	(0.07)	(0.21)	(0.24)	(0.18)	(0.14)	(0.16)	(0.18)
Inventory		(0.85)	(2.77)	(0.54)	(0.42)	(0.23)	(0.24)	(0.25)	(0.27)
Accounts payable		6.50	(14.13)	(4.54)	1.22	0.92	0.69	0.79	0.91
Accrued liabilities		(3.15)	0.07	0.21	0.24	0.18	0.14	0.16	0.18
Other liabilities		(3.47)	(3.17)	0.29	0.67	0.37	0.38	0.40	0.42
Change in Working Capital		(4.95)	(33.36)	(7.40)	3.14	0.14	(0.13)	(0.07)	0.01
Cash Flow from Operating Activities		**1.04**	**4.05**	**32.31**	**42.91**	**29.03**	**27.26**	**27.30**	**27.15**
Investing Activity									
Expenditures for property, plant and equipment		(15.00)	(2.50)	(2.50)	(2.50)	(2.50)	(2.50)	(2.50)	(2.50)
Other Long-term assets		-	(0.50)	-	(0.50)	-	(0.50)	-	-
Cash Flow from Investing Activities		**(15.00)**	**(3.00)**	**(2.50)**	**(3.00)**	**(2.50)**	**(3.00)**	**(2.50)**	**(2.50)**
Financing Activity									
Proceeds from or repayment of debt		(0.30)	-	-	-	-	-	-	-
Proceeds from issuance of common stock		15.00	-	-	-	-	-	-	-
Cash Flow from Financing Activities		**14.70**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Effect of Foreign Exchange		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Net Change in Cash		**0.74**	**1.05**	**29.81**	**39.91**	**26.53**	**24.26**	**24.80**	**24.65**
Opening Cash Balance		**0.40**	**1.14**	**2.19**	**32.00**	**71.91**	**98.44**	**122.70**	**147.50**
Ending Cash Balance	**0.40**	**1.14**	**2.19**	**32.00**	**71.91**	**98.44**	**122.70**	**147.50**	**172.14**

Summary Sheet – Optimistic Case

Profitability Metrics	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Operating Margin	NM	39%	37%	34%	31%	29%	28%	27%	25%
Pre Tax Profit Margin	-12298%	5%	28%	26%	23%	22%	20%	19%	18%
Net Profit Margin	NM	5%	28%	26%	23%	15%	13%	12%	12%
Interest Coverage	(3.32)	122.12	74	75	68	62	59	56	52
Tax Rate	0%	0%	0%	0%	0%	30%	35%	35%	35%

Performance Metrics	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Return on Equity (ROE)	NA	40%	91%	49%	33%	18%	14%	12%	11%
Return on Assets (ROA)	-43%	4%	66%	43%	30%	16%	13%	11%	10%
Return on Invested Capital (ROI)	62%	40%	91%	49%	33%	18%	14%	12%	11%

Per Share Data	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Sales per Share	0.00	0.04	0.18	0.21	0.23	0.24	0.25	0.26	0.28
Cash per Share	0.00	0.00	0.00	0.05	0.11	0.15	0.19	0.23	0.27
Current Assets per Share	0.01	0.01	0.04	0.09	0.15	0.19	0.23	0.27	0.31
Total Assets per Share	0.13	0.05	0.08	0.12	0.18	0.22	0.25	0.29	0.32
Tangible Book Value per Share	0.13	0.05	0.08	0.12	0.18	0.22	0.25	0.29	0.32
Long Term Debt - per Share	0.22	0.05	0.02	0.01	0.02	0.02	0.02	0.02	0.03
Working Capital per Share	(0.21)	(0.04)	0.01	0.02	0.02	0.02	0.02	0.02	0.02
Free Cash Flow per Share	0.17	(0.02)	0.00	0.05	0.06	0.04	0.04	0.04	0.04

Price/ Earnings	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Price Earnings Ratio - Closing Price	(0.81)	22.16	0.88	0.83	0.83	1.23	1.33	1.35	1.38
Price to Sales Ratio - Closing Price	100.07	0.23	0.06	0.05	0.04	0.04	0.04	0.04	0.04

Valuation Metrics	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Price to Sales	100.07	0.23	0.06	0.05	0.04	0.04	0.04	0.04	0.04
Price to Book Value	0.35	0.19	0.13	0.08	0.06	0.05	0.04	0.03	0.03
Price to Cash Flow	NA	6.16	1.58	0.20	0.15	0.22	0.23	0.23	0.24
Price to Free Cash Flow	NA	(0.46)	4.28	0.21	0.16	0.24	0.26	0.25	0.26
Price Earnings Ratio - Closing Price	(0.81)	22.16	0.88	0.83	0.83	1.23	1.33	1.35	1.38

Income Statement – Pessimistic Case

all figures in $ million	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Revenues	**0.06**	**24.38**	**91.44**	**105.16**	**115.67**	**121.46**	**127.53**	**133.90**	**140.60**
Total Cost of Goods Sold	0.04	15.24	57.15	65.72	72.29	75.91	79.70	83.69	87.87
Gross Profit	**0.02**	**9.14**	**34.29**	**39.43**	**43.38**	**45.55**	**47.82**	**50.21**	**52.72**
Expenses									
Selling, General and Admin Exper	**3.25**	4.23	5.59	9.79	14.68	18.35	21.10	24.27	27.91
Total Expenses	**3.25**	**4.23**	**5.59**	**9.79**	**14.68**	**18.35**	**21.10**	**24.27**	**27.91**
Operating Profit/ EBITDA	**(3.23)**	**4.92**	**28.70**	**29.65**	**28.70**	**27.19**	**26.72**	**25.94**	**24.81**
Depreciation and Amortization	1.98	4.70	4.95	5.20	5.45	5.70	5.95	6.20	6.45
Earnings Before Interest and T	**(5.21)**	**0.22**	**23.75**	**24.45**	**23.25**	**21.49**	**20.77**	**19.74**	**18.36**
Interest Expense, Net	1.57	0.01	0.35	0.37	0.40	0.43	0.45	0.47	0.49
Other Costs	1.09	-	-	-	-	-	-	-	-
Profit Before Tax	**(7.87)**	**0.21**	**23.40**	**24.08**	**22.84**	**21.07**	**20.32**	**19.28**	**17.87**
Taxation Expenses (Recovery)	-	-	-	-	-	6.32	7.11	6.75	6.26
Net Profit/Loss for the period	**(7.87)**	**0.21**	**23.40**	**24.08**	**22.84**	**14.75**	**13.21**	**12.53**	**11.62**
Shares Outstanding - Basic	144.6	677.9	704.6	704.6	704.6	704.6	704.6	704.6	704.6
Shares Outstanding - Diluted	144.6	677.9	704.6	704.6	704.6	704.6	704.6	704.6	704.6
EPS - Basic	(0.0544)	0.0003	0.0332	0.0342	0.0324	0.0209	0.0187	0.0178	0.0165
EPS - Diluted	(0.0544)	0.0003	0.0332	0.0342	0.0324	0.0209	0.0187	0.0178	0.0165

Balance Sheet – Pessimistic Case

all figures in $ million	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
ASSETS									
Cash and Cash Equivalents	0.40	0.57	0.13	20.10	48.13	66.38	82.58	98.92	114.69
Accounts Receivable	-	3.66	13.72	15.77	14.46	15.18	15.94	16.74	17.57
Prepaids and Other Current Asset	0.33	0.21	0.28	0.49	0.73	0.92	1.06	1.21	1.40
Inventory	-	0.76	2.86	3.29	3.61	3.80	3.99	4.18	4.39
Total Current Assets	**0.73**	**5.20**	**16.98**	**39.65**	**66.94**	**86.27**	**103.56**	**121.06**	**138.05**
Property, Plant and Equipment, Gross	32.00	47.00	49.50	52.00	54.50	57.00	59.50	62.00	64.50
Accumulated Depreciation	15.10	19.80	24.75	29.95	35.40	41.10	47.05	53.25	59.70
Property, Plant and Equipment, Net	16.90	27.20	24.75	22.05	19.10	15.90	12.45	8.75	4.80
Mineral Properties	0.60	0.60	1.10	1.10	1.60	1.60	2.10	2.10	2.10
Other Non-Current Assets	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Total Assets	**18.22**	**33.00**	**42.83**	**62.80**	**87.63**	**103.77**	**118.11**	**131.91**	**144.95**
LIABILITIES									
Accounts Payable & Liabilities	14.63	21.13	6.99	2.45	3.67	4.59	5.28	6.07	6.98
Other Short term Liabilities	3.36	0.21	0.28	0.49	0.73	0.92	1.06	1.21	1.40
Short Term Debt	13.02	8.53	5.03	5.26	5.78	6.07	6.38	6.70	7.03
Total Current Liabilities	**31.00**	**29.87**	**12.30**	**8.19**	**10.19**	**11.58**	**12.71**	**13.98**	**15.40**
Long Term Debt	0.30	-	-	-	-	-	-	-	-
Total Liabilities	**31.30**	**29.87**	**12.30**	**8.19**	**10.19**	**11.58**	**12.71**	**13.98**	**15.40**
Preferred Stock	-	-	-	-	-	-	-	-	-
Common Stock	0.29	1.36	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Additional Capital	80.50	95.43	99.38	99.38	99.38	99.38	99.38	99.38	99.38
Retained Earnings	(93.85)	(93.64)	(70.25)	(46.17)	(23.33)	(8.58)	4.63	17.16	28.77
Total Shareholders Equity	**(13.07)**	**3.14**	**30.54**	**54.61**	**77.46**	**92.20**	**105.41**	**117.94**	**129.56**
Total Liabilities and Shareholders Equity	**18.23**	**33.01**	**42.84**	**62.81**	**87.64**	**103.78**	**118.12**	**131.92**	**144.96**

Cash Flow Statement – Pessimistic Case

all figures in $ million		2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Operating Activity									
Net Income		0.21	23.40	24.08	22.84	14.75	13.21	12.53	11.62
Adjustments to Reconcile Cash Flows									
Depreciation and Amortization		4.70	4.95	5.20	5.45	5.70	5.95	6.20	6.45
Other Adjustments		-	-	-	-	-	-	-	-
Changes in operating assets and liabilities:									
Accounts receivable		(3.66)	(10.06)	(2.06)	1.31	(0.72)	(0.76)	(0.80)	(0.84)
Prepaids and Other Current Assets		0.11	(0.07)	(0.21)	(0.24)	(0.18)	(0.14)	(0.16)	(0.18)
Inventory		(0.76)	(2.10)	(0.43)	(0.33)	(0.18)	(0.19)	(0.20)	(0.21)
Accounts payable		6.50	(14.13)	(4.54)	1.22	0.92	0.69	0.79	0.91
Accrued liabilities		(3.15)	0.07	0.21	0.24	0.18	0.14	0.16	0.18
Other liabilities		(4.48)	(3.51)	0.23	0.53	0.29	0.30	0.32	0.33
Change in Working Capital		(5.44)	(29.79)	(6.80)	2.74	0.30	0.04	0.11	0.20
Cash Flow from Operating Activities		**(0.53)**	**(1.45)**	**22.48**	**31.03**	**20.75**	**19.20**	**18.84**	**18.27**
Investing Activity									
Expenditures for property, plant and equipment		(15.00)	(2.50)	(2.50)	(2.50)	(2.50)	(2.50)	(2.50)	(2.50)
Other Long-term assets		-	(0.50)	-	(0.50)	-	(0.50)	-	-
Cash Flow from Investing Activities		**(15.00)**	**(3.00)**	**(2.50)**	**(3.00)**	**(2.50)**	**(3.00)**	**(2.50)**	**(2.50)**
Financing Activity									
Proceeds from or repayment of debt		(0.30)	-	-	-	-	-	-	-
Proceeds from issuance of common stock		16.00	4.00	-	-	-	-	-	-
Cash Flow from Financing Activities		**15.70**	**4.00**	**-**	**-**	**-**	**-**	**-**	**-**
Effect of Foreign Exchange		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Net Change in Cash		**0.17**	**(0.45)**	**19.98**	**28.03**	**18.25**	**16.20**	**16.34**	**15.77**
Opening Cash Balance		**0.40**	**0.57**	**0.13**	**20.10**	**48.13**	**66.38**	**82.58**	**98.92**
Ending Cash Balance	**0.40**	**0.57**	**0.13**	**20.10**	**48.13**	**66.38**	**82.58**	**98.92**	**114.69**

Summary Sheet – Pessimistic Case

Profitability Metrics	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Operating Margin	NM	39%	37%	33%	30%	27%	26%	24%	22%
Pre Tax Profit Margin	-12298%	1%	26%	23%	20%	17%	16%	14%	13%
Net Profit Margin	NM	1%	26%	23%	20%	12%	10%	9%	8%
Interest Coverage	(3.32)	20.59	67	66	57	51	47	42	37
Tax Rate	0%	0%	0%	0%	0%	30%	35%	35%	35%

Performance Metrics	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Return on Equity (ROE)	NA	7%	77%	44%	29%	16%	13%	11%	9%
Return on Assets (ROA)	-43%	1%	55%	38%	26%	14%	11%	9%	8%
Return on Invested Capital (ROI)	62%	7%	77%	44%	29%	16%	13%	11%	9%

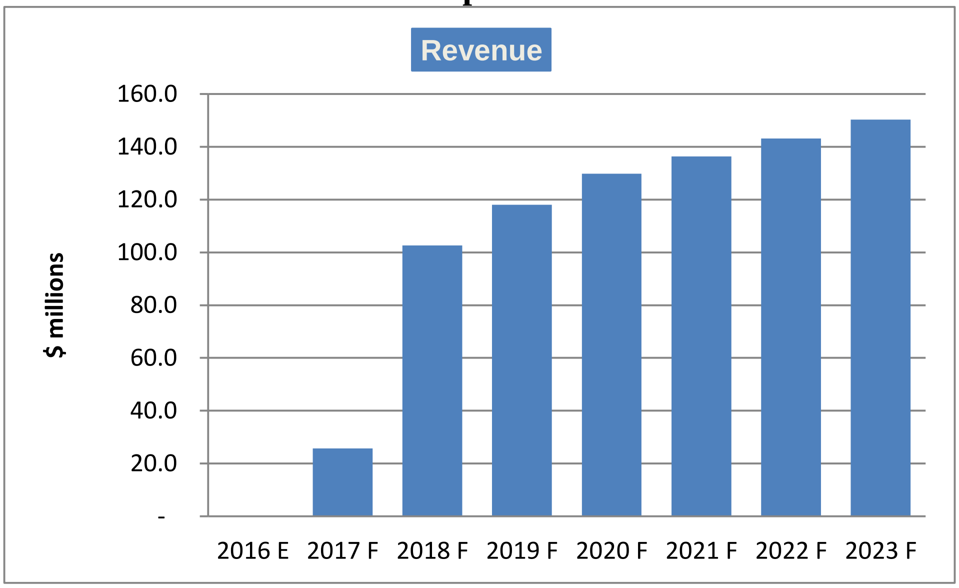
Per Share Data	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Sales per Share	0.00	0.04	0.13	0.15	0.16	0.17	0.18	0.19	0.20
Cash per Share	0.00	0.00	0.00	0.03	0.07	0.09	0.12	0.14	0.16
Current Assets per Share	0.01	0.01	0.02	0.06	0.10	0.12	0.15	0.17	0.20
Total Assets per Share	0.13	0.05	0.06	0.09	0.12	0.15	0.17	0.19	0.21
Tangible Book Value per Share	0.13	0.05	0.06	0.09	0.12	0.15	0.17	0.19	0.21
Long Term Debt - per Share	0.22	0.04	0.02	0.01	0.01	0.02	0.02	0.02	0.02
Working Capital per Share	(0.21)	(0.04)	0.01	0.02	0.01	0.01	0.01	0.01	0.01
Free Cash Flow per Share	0.17	(0.02)	(0.01)	0.03	0.04	0.03	0.02	0.02	0.02

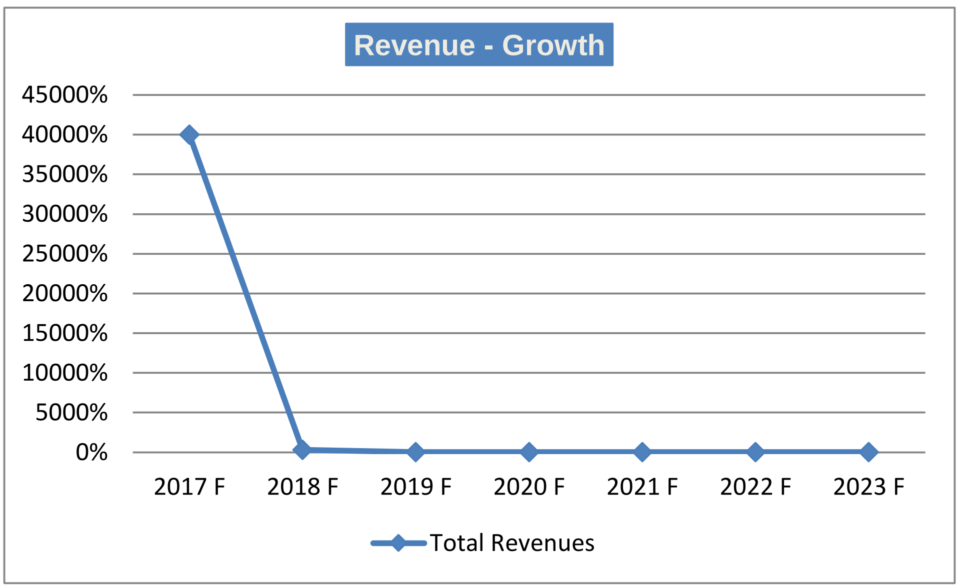
Price/ Earnings	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Price Earnings Ratio - Closing Price	(0.81)	144.13	1.33	1.30	1.37	2.12	2.36	2.49	2.69
Price to Sales Ratio - Closing Price	100.07	0.26	0.07	0.06	0.06	0.05	0.05	0.05	0.05

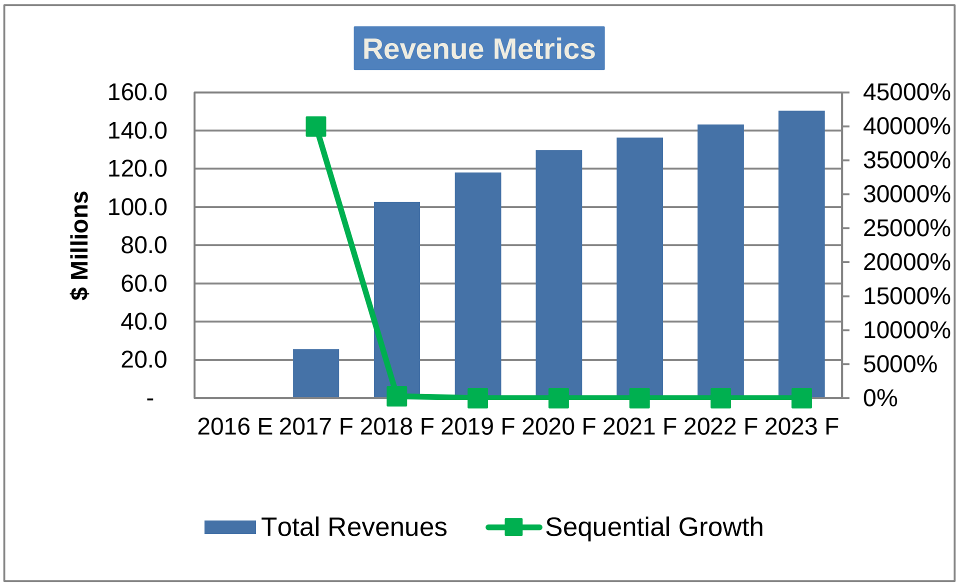
Valuation Metrics	2016 E	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Price to Sales	100.07	0.26	0.07	0.06	0.06	0.05	0.05	0.05	0.05
Price to Book Value	0.35	0.19	0.15	0.10	0.07	0.06	0.05	0.05	0.04
Price to Cash Flow	NA	(12.16)	(4.42)	0.28	0.21	0.31	0.33	0.34	0.35
Price to Free Cash Flow	NA	(0.41)	(1.56)	0.31	0.23	0.35	0.39	0.38	0.40
Price Earnings Ratio - Closing Price	(0.81)	144.13	1.33	1.30	1.37	2.12	2.36	2.49	2.69

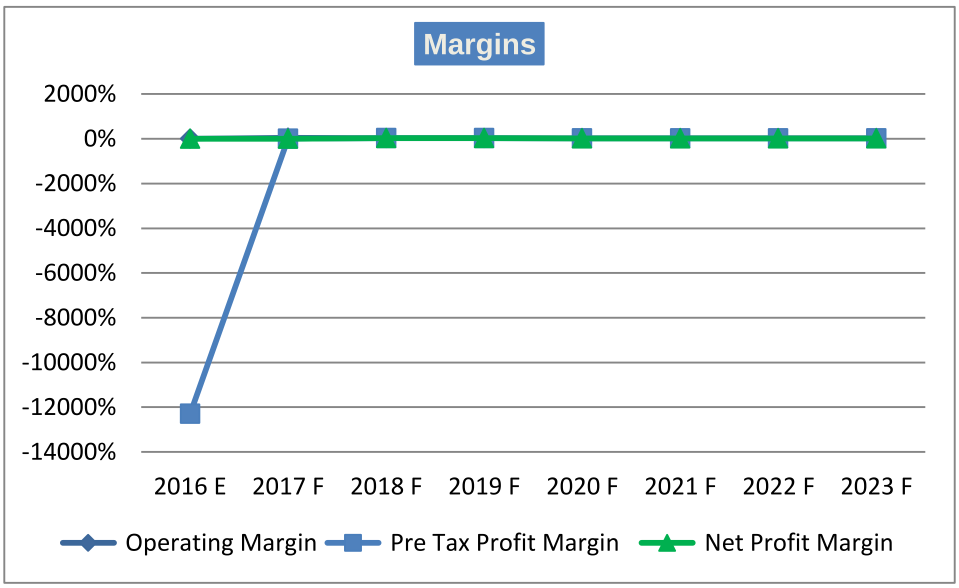
GRAPHS AND CHARTS

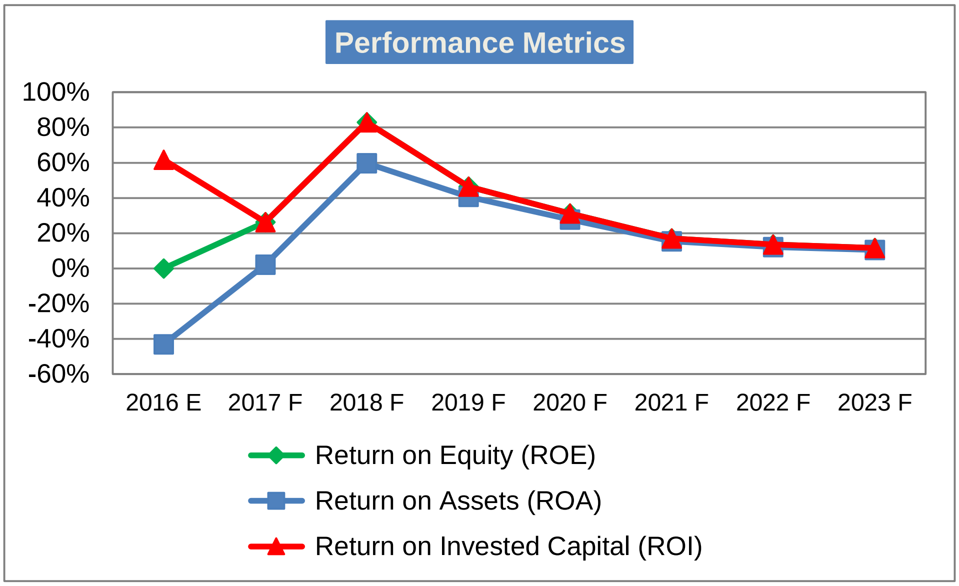
Base Case Graphics and Charts

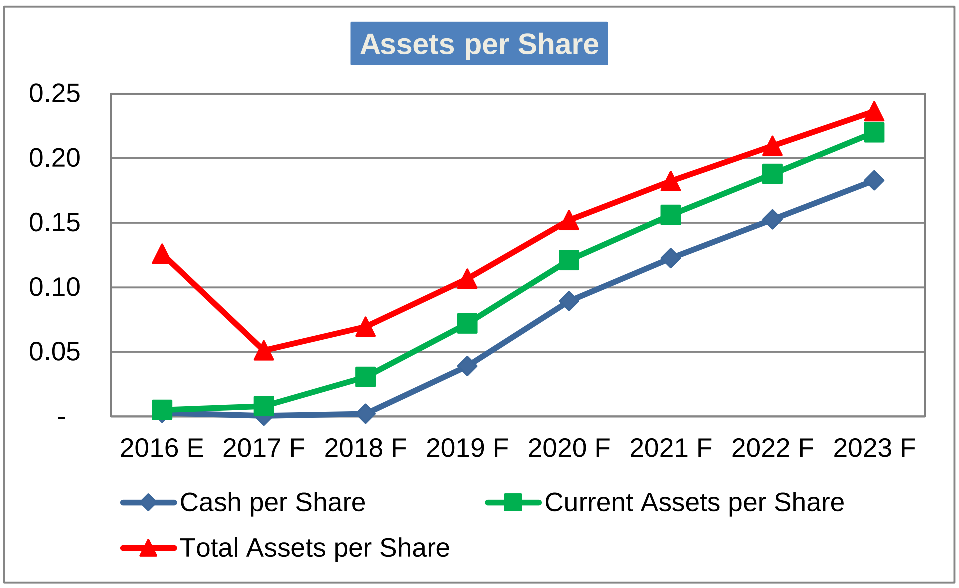


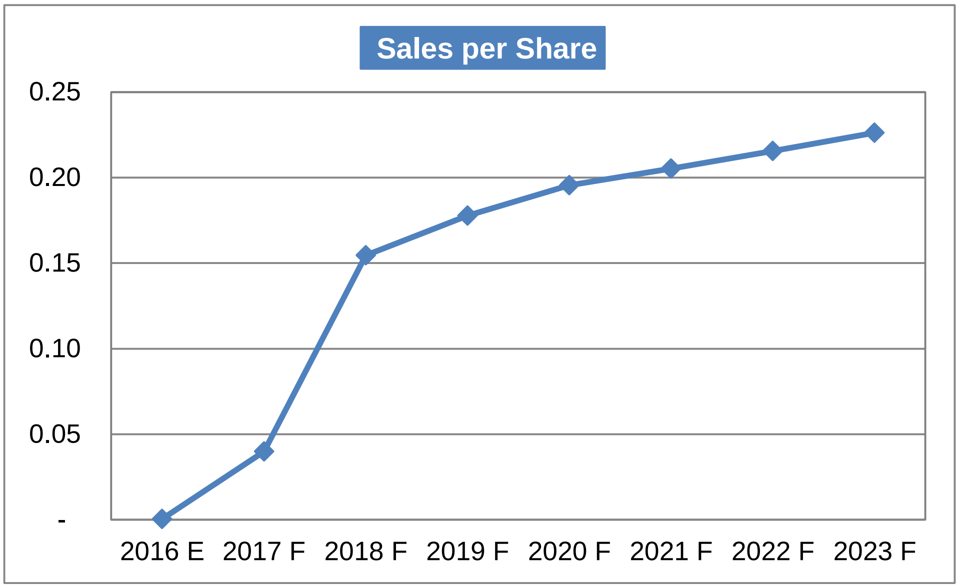


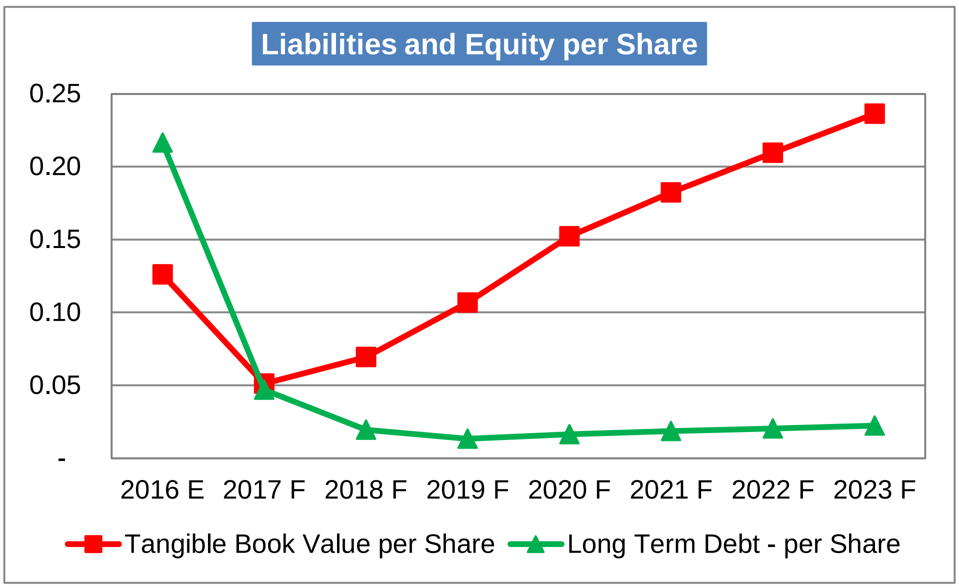

Revenue Metrics
$ Millions
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
-
45000%
40000%
35000%
30000%
25000%
20000%
15000%
10000%
5000%
0%
2016 E 2017 F 2018 F 2019 F 2020 F 2021 F 2022 F 2023 F
Total Revenues
Sequential Growth

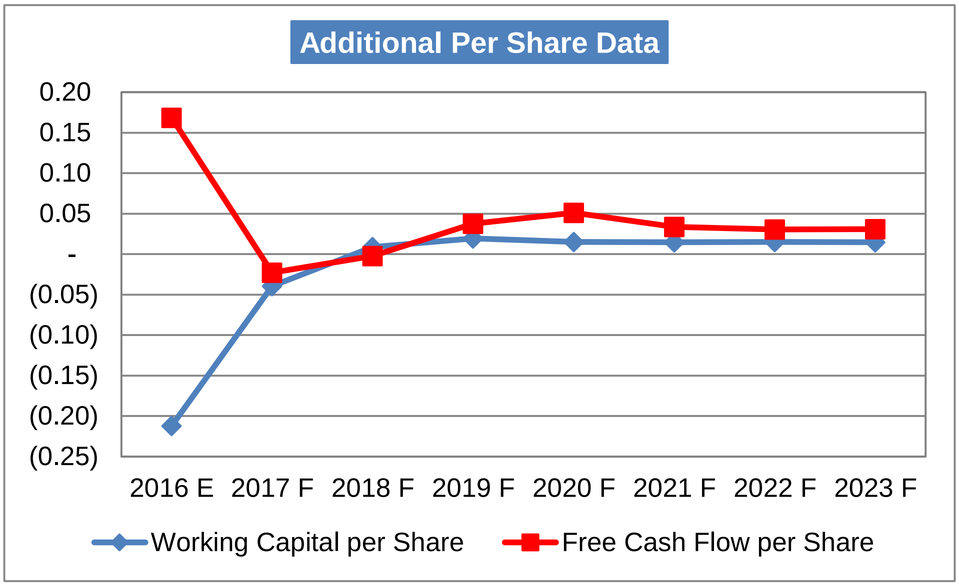

Margins
2000%
0%
-2000%
-4000%
-6000%
-8000%
-10000%
-12000%
-14000%
2016 E 2017 F 2018 F 2019 F 2020 F 2021 F 2022 F 2023 F
Operating Margin
Pre Tax Profit Margin
Net Profit Margin


Performance Metrics
100%
80%
60%
40%
20%
0%
-20%
-40%
-60%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Return on Equity (ROE)
Return on Assets (ROA)
Return on Invested Capital (ROI)

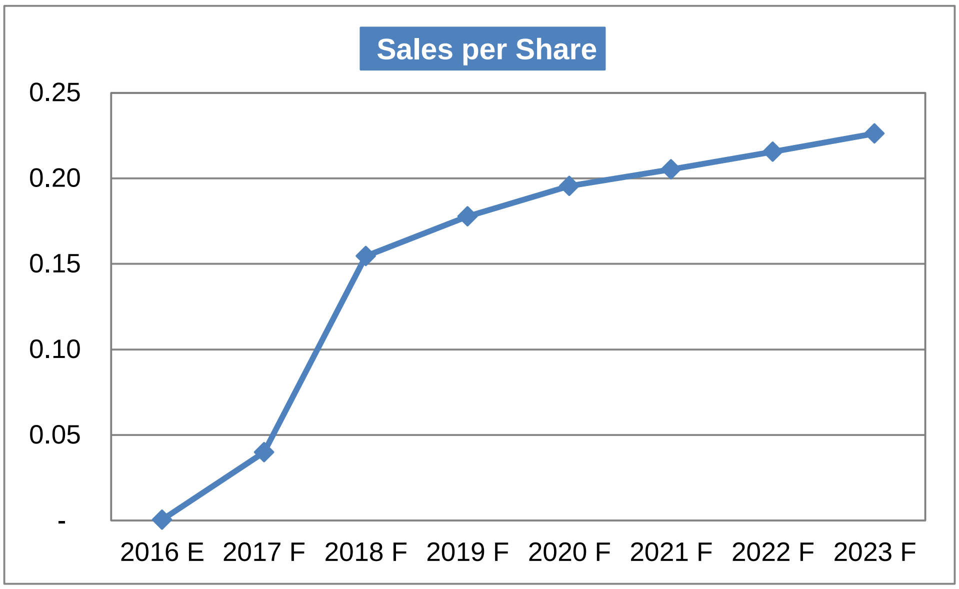

Assets per Share
0.25
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Cash per Share
Current Assets per Share
Total Assets per Share


Sales per Share
0.25
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F

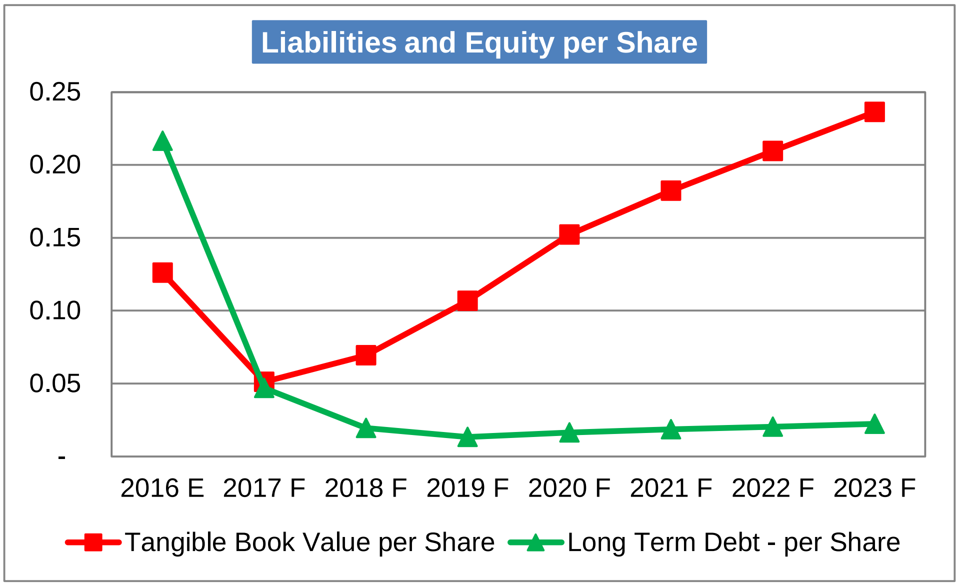

Liabilities and Equity per Share
0.25
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Tangible Book Value per Share
Long Term Debt - per Share

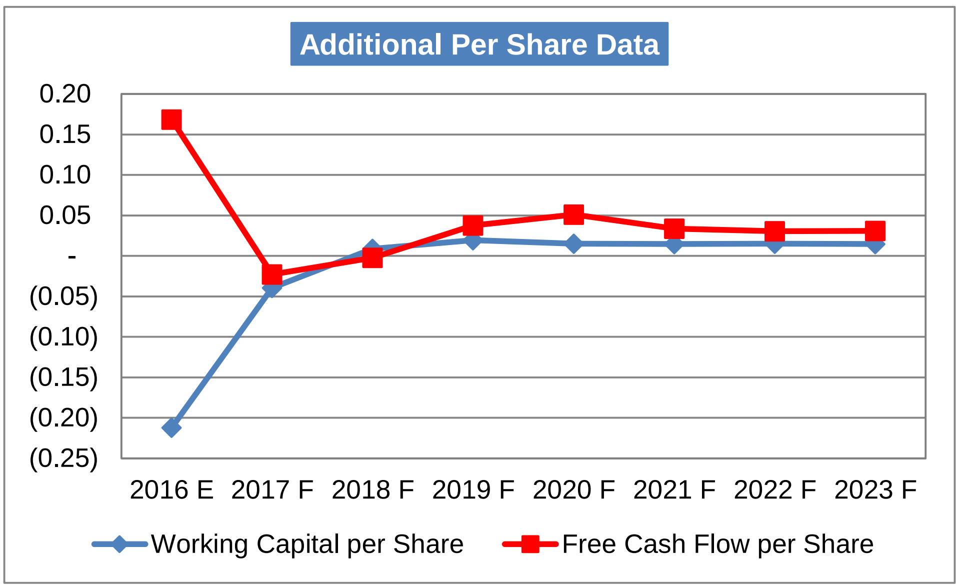


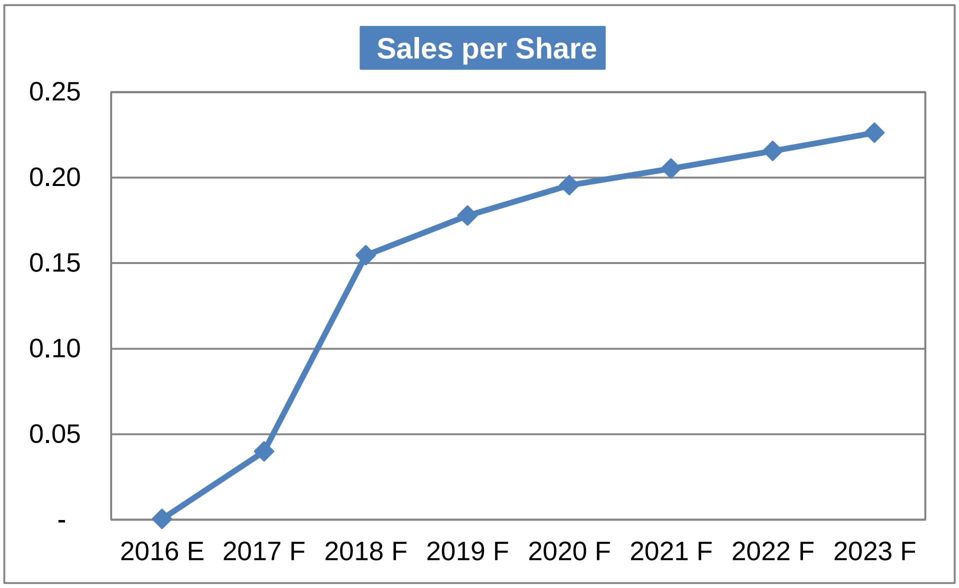
Additional Per Share Data
0.20
0.15
0.10
0.05
-
(0.05)
(0.10)
(0.15)
(0.20)
(0.25)
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Working Capital per Share
Free Cash Flow per Share

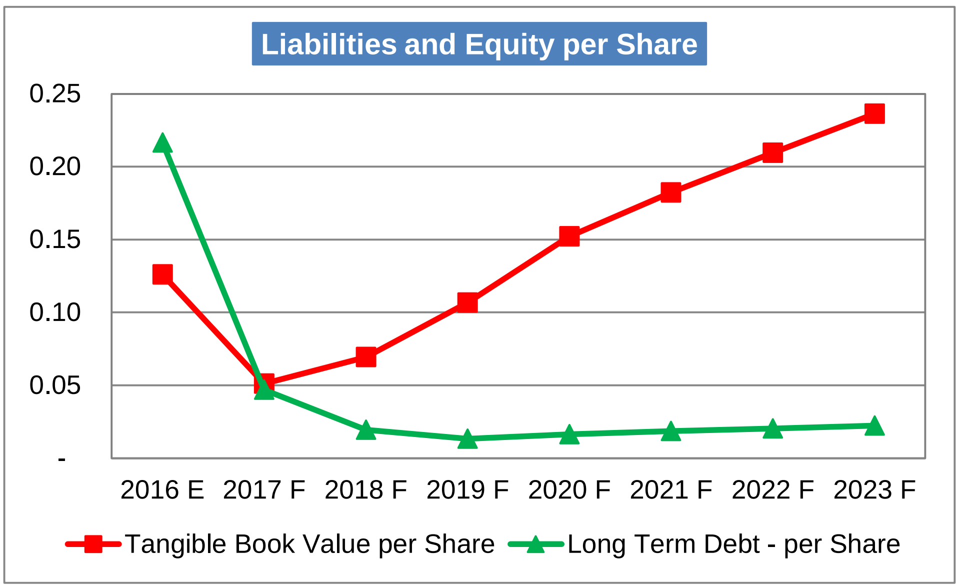


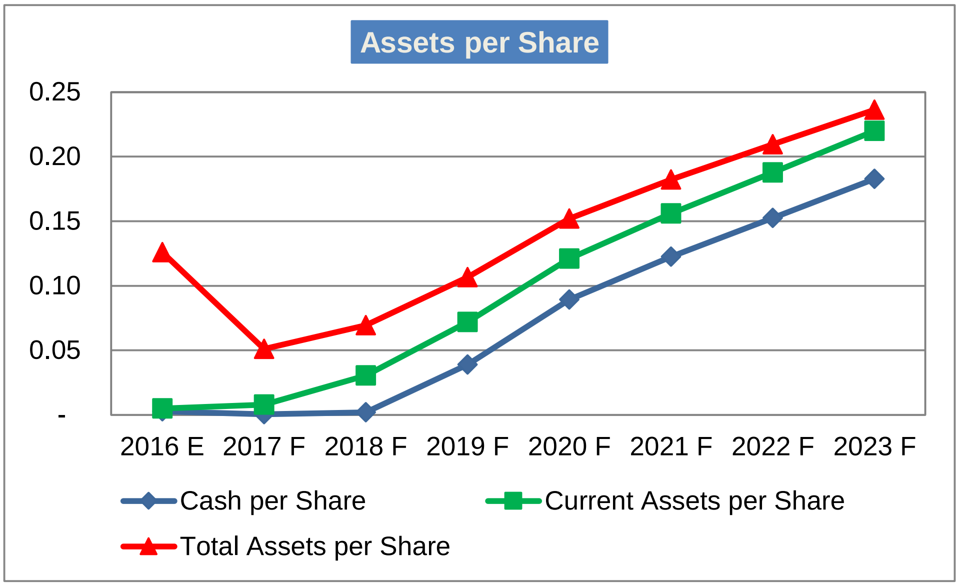
Sales per Share
0.25
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F

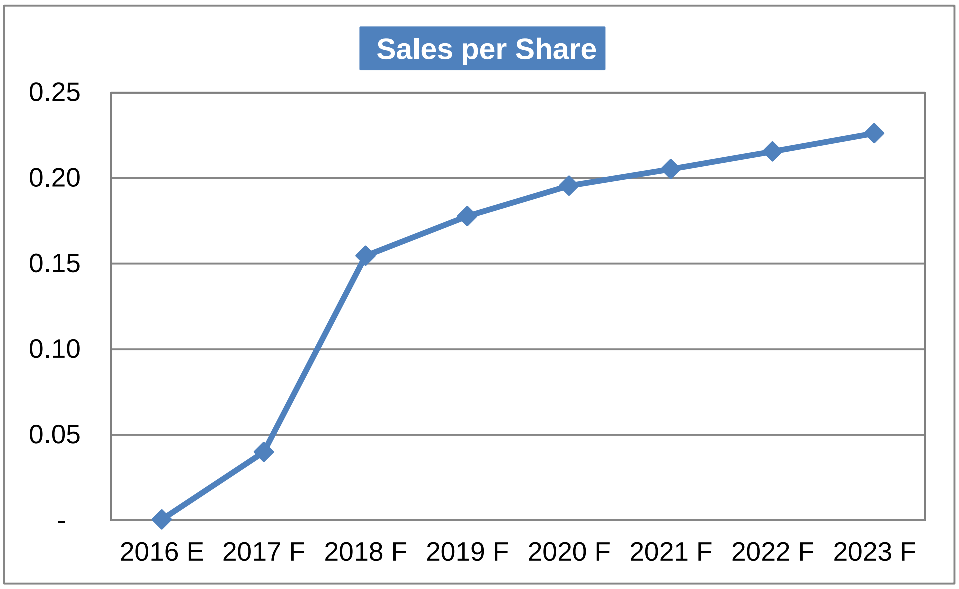

Liabilities and Equity per Share
0.25
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Tangible Book Value per Share
Long Term Debt - per Share

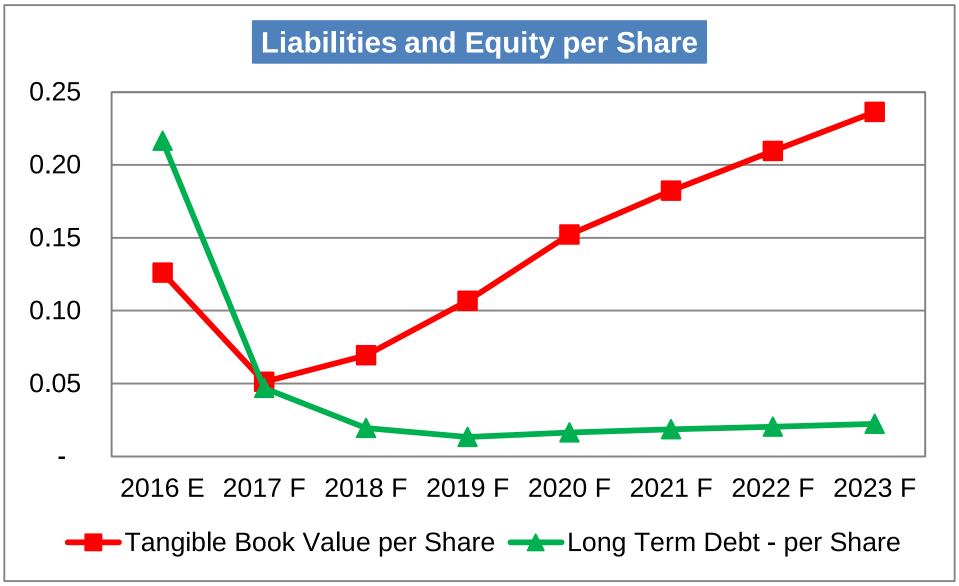

Additional Per Share Data
0.20
0.15
0.10
0.05
-
(0.05)
(0.10)
(0.15)
(0.20)
(0.25)
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Working Capital per Share
Free Cash Flow per Share

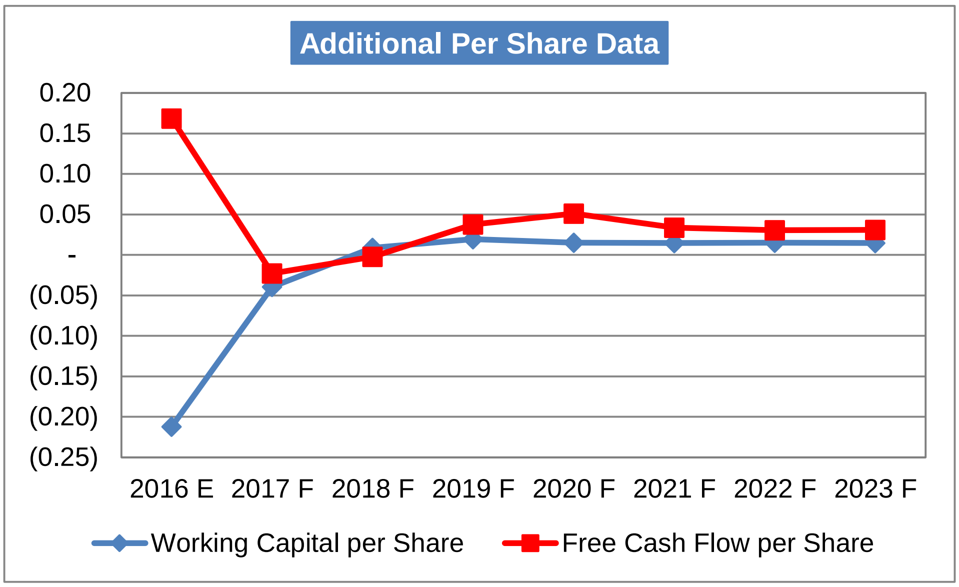

Sales per Share
0.25
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F


Liabilities and Equity per Share
0.25
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Tangible Book Value per Share
Long Term Debt - per Share

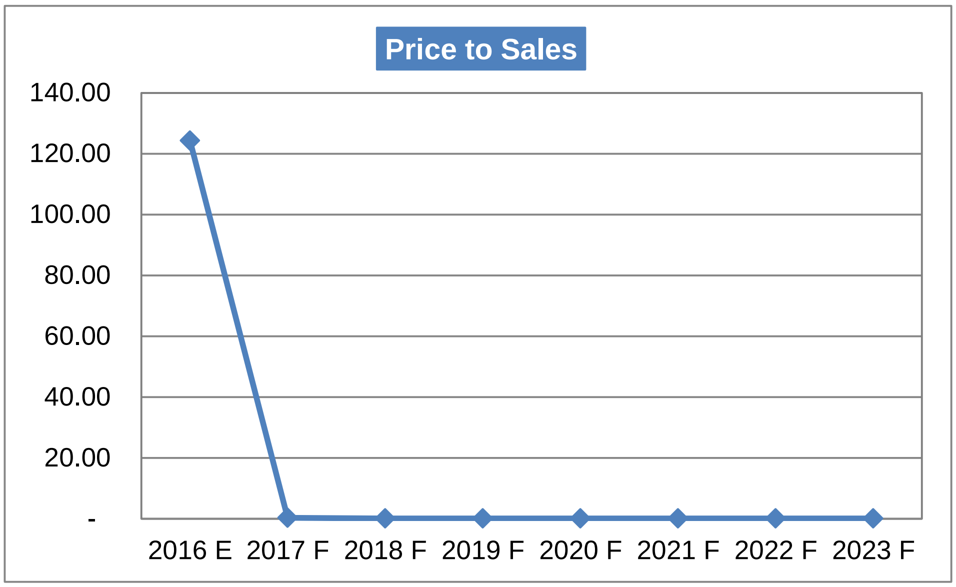

Assets per Share
0.25
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Cash per Share
Current Assets per Share
Total Assets per Share

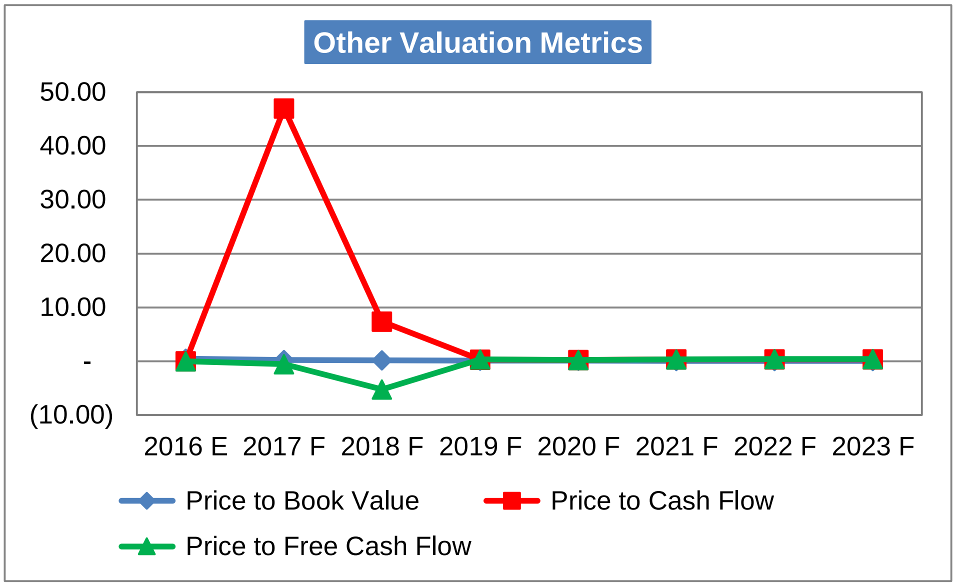

Sales per Share
0.25
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F

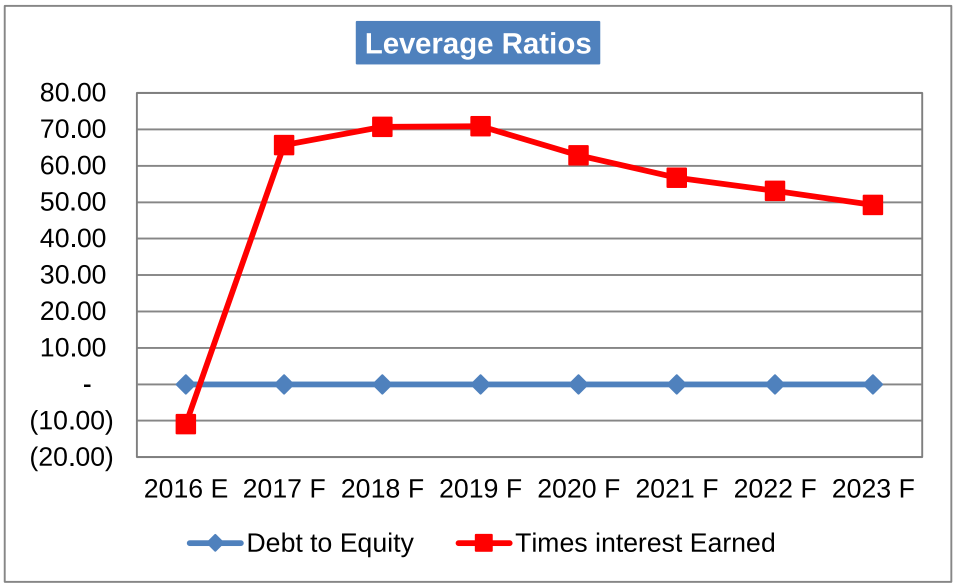

Liabilities and Equity per Share
0.25
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Tangible Book Value per Share
Long Term Debt - per Share

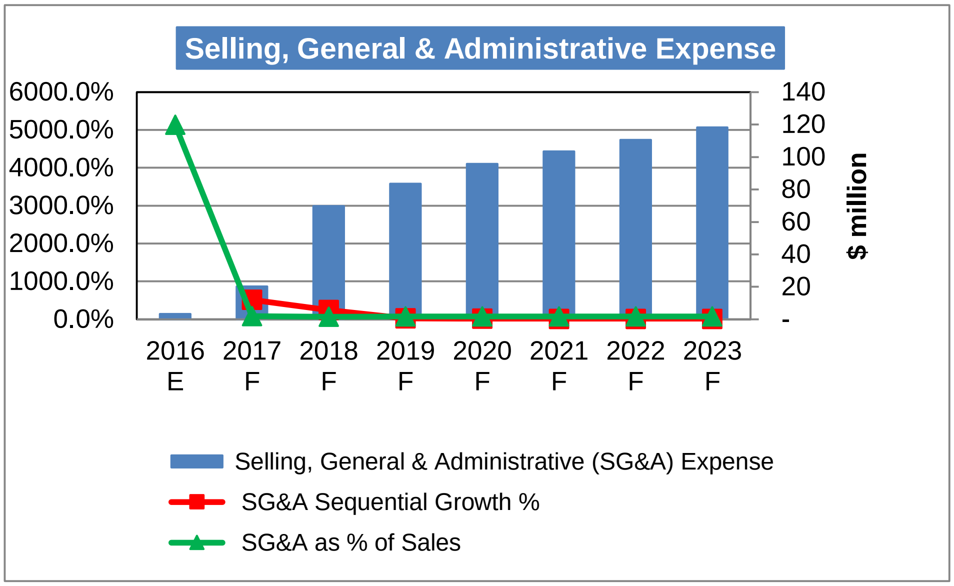

Additional Per Share Data
0.20
0.15
0.10
0.05
-
(0.05)
(0.10)
(0.15)
(0.20)
(0.25)
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Working Capital per Share
Free Cash Flow per Share

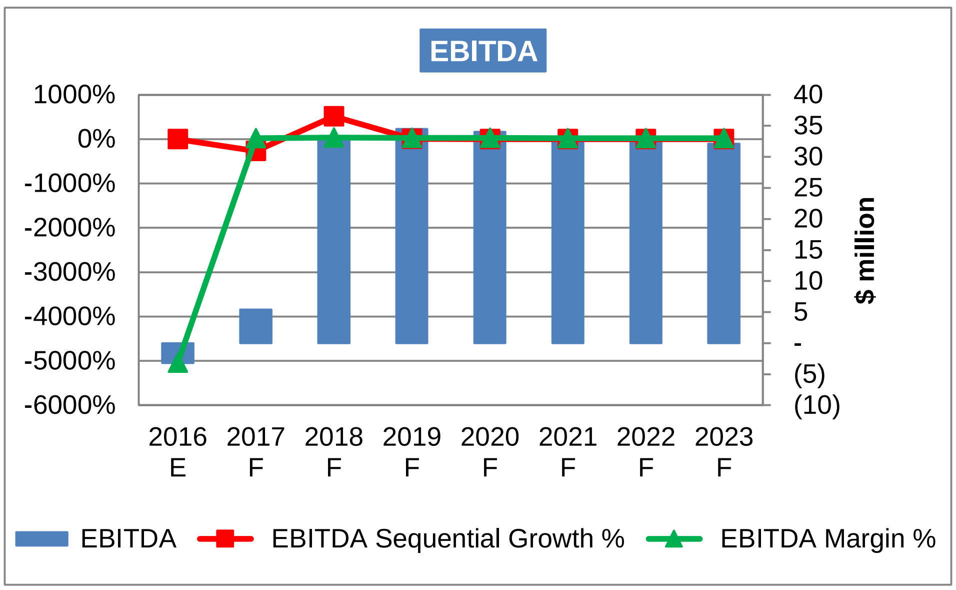

Price to Earnings
60.00
50.00
40.00
30.00
20.00
10.00
-
(10.00)
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F

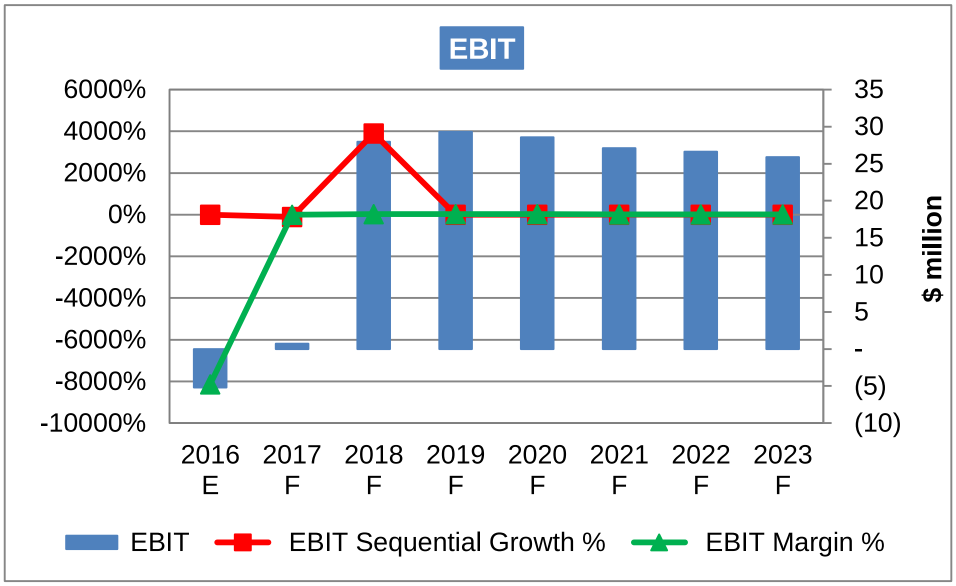

Price to Sales
140.00
120.00
100.00
80.00
60.00
40.00
20.00
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F

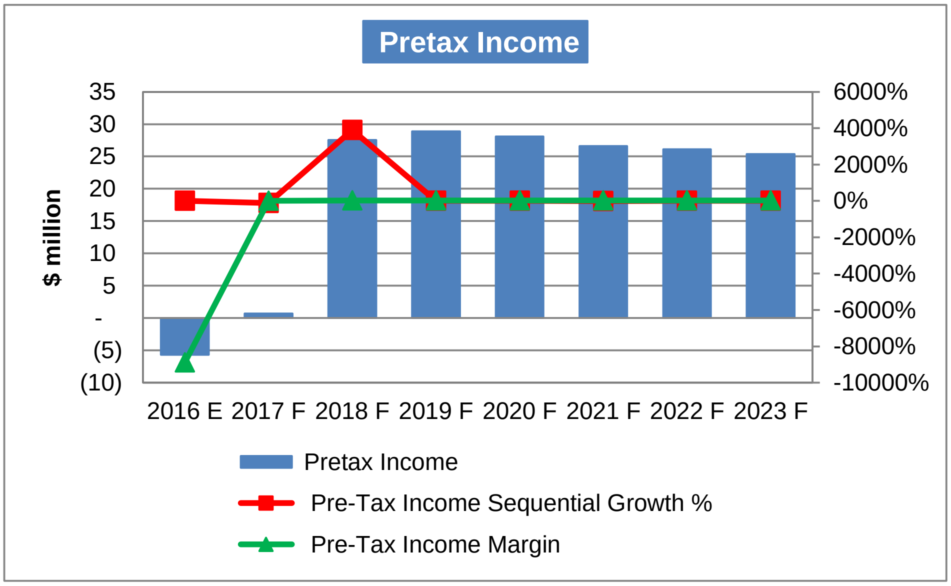

Other Valuation Metrics
50.00
40.00
30.00
20.00
10.00
-
(10.00)
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Price to Book Value
Price to Cash Flow
Price to Free Cash Flow

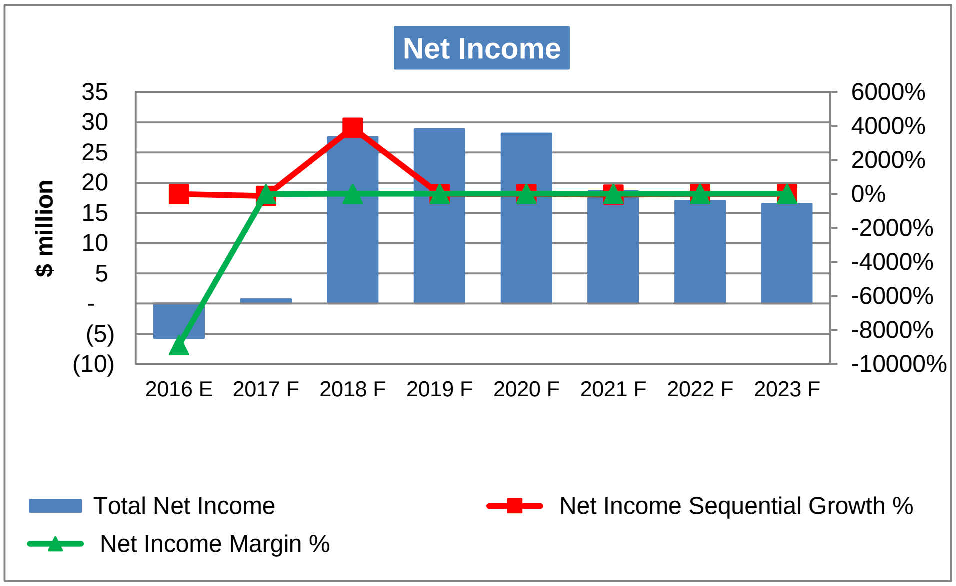

Leverage Ratios
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
-
(10.00)
(20.00)
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Debt to Equity
Times interest Earned

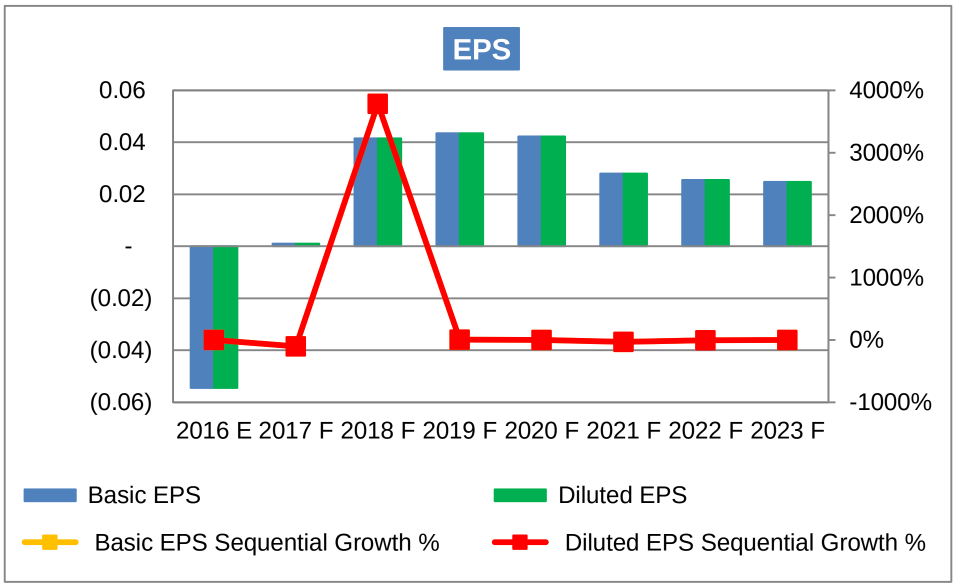

Selling, General & Administrative Expense
6000.0%
5000.0%
4000.0%
3000.0%
2000.0%
1000.0%
0.0%
140
120
100
80
60
40
20
-
$ million
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Selling, General & Administrative (SG&A) Expense
SG&A Sequential Growth %
SG&A as % of Sales

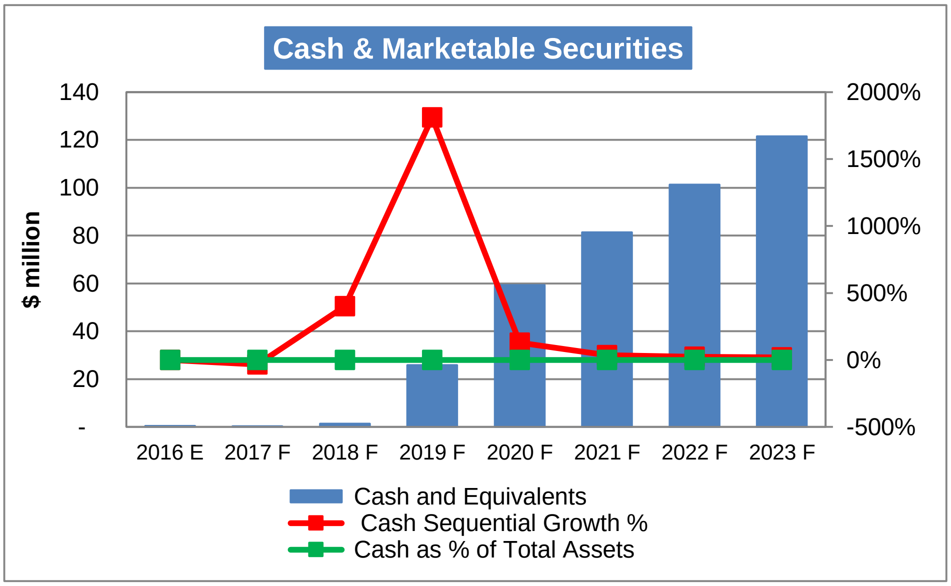

EBITDA
1000%
0%
-1000%
-2000%
-3000%
-4000%
-5000%
-6000%
40
35
30
25
20
15
10
5
-
(5)
(10)
$ million
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
EBITDA
EBITDA Sequential Growth %
EBITDA Margin %

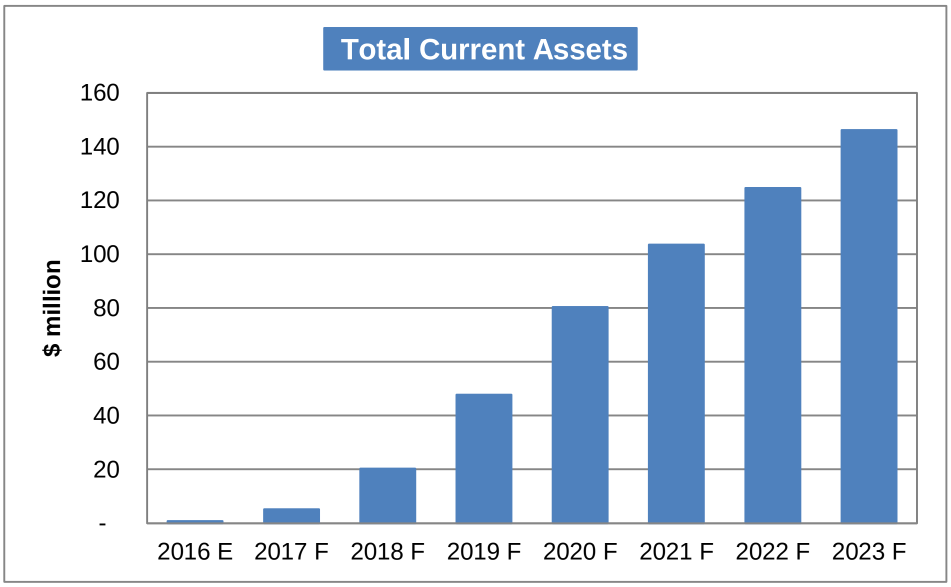

EBIT
6000%
4000%
2000%
0%
-2000%
-4000%
-6000%
-8000%
-10000%
35
30
25
20
15
10
5
-
(5)
(10)
$ million
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
EBIT
EBIT Sequential Growth %
EBIT Margin %

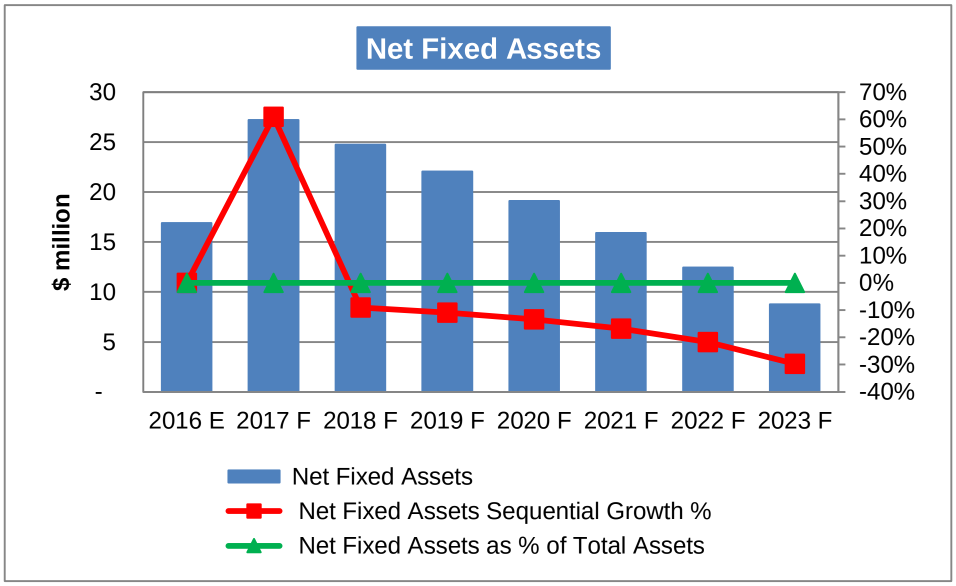

Pretax Income
35
30
25
20
15
10
5
-
(5)
(10)
$ million
6000%
4000%
2000%
0%
-2000%
-4000%
-6000%
-8000%
-10000%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Pretax Income
Pre-Tax Income Sequential Growth %
Pre-Tax Income Margin

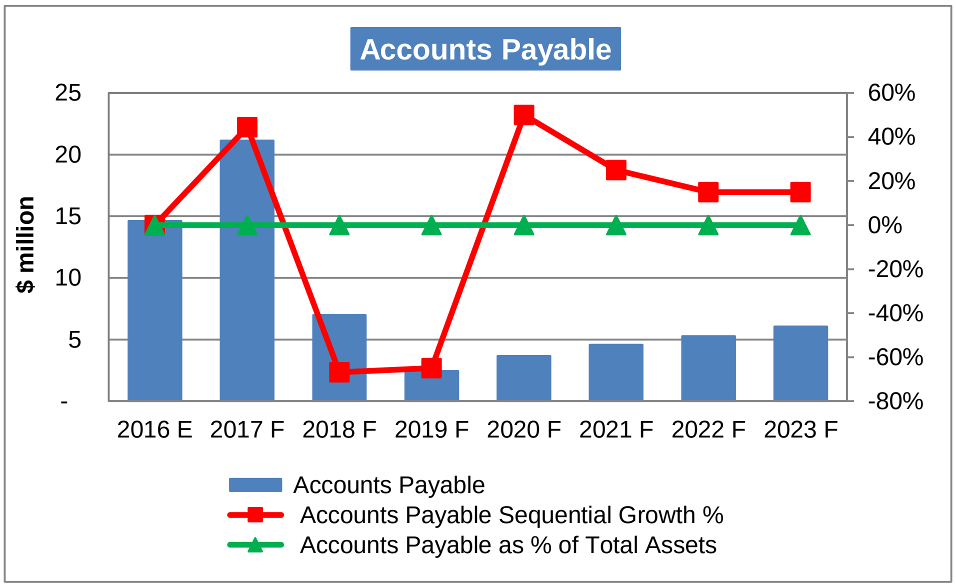

Net Income
$ million
35
30
25
20
15
10
5
-
(5)
(10)
6000%
4000%
2000%
0%
-2000%
-4000%
-6000%
-8000%
-10000%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Total Net Income
Net Income Sequential Growth %
Net Income Margin %

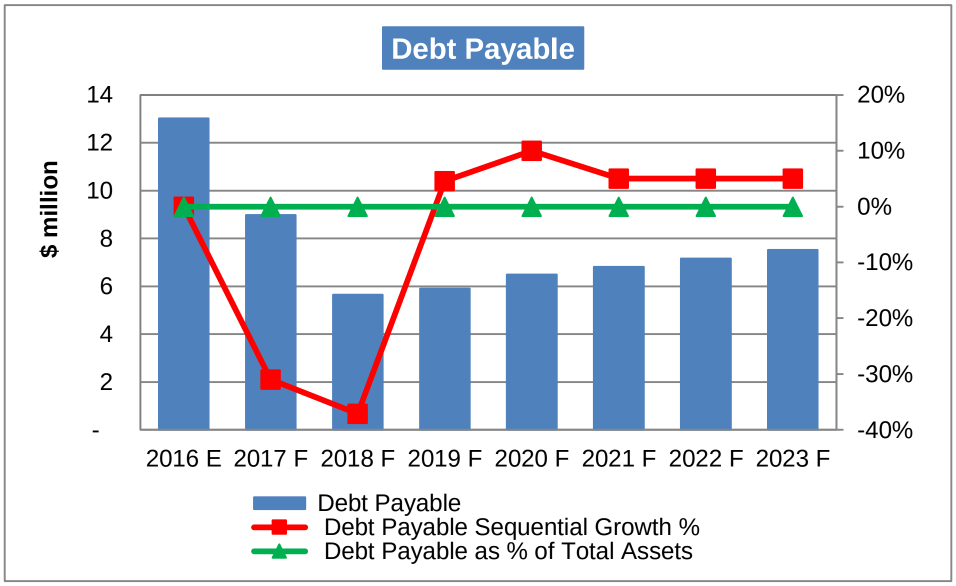

EPS
0.06
0.04
0.02
-
(0.02)
(0.04)
(0.06)
4000%
3000%
2000%
1000%
0%
-1000%
2016 E 2017 F 2018 F 2019 F 2020 F 2021 F 2022 F 2023 F
Basic EPS
Diluted EPS
Basic EPS Sequential Growth %
Diluted EPS Sequential Growth %

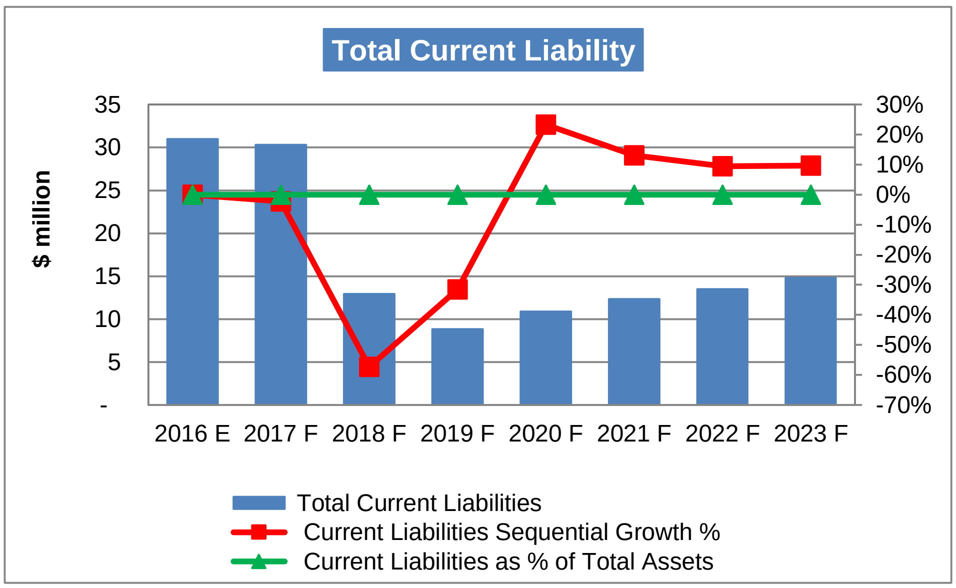

Cash & Marketable Securities
$ million
140
120
100
80
60
40
20
-
2000%
1500%
1000%
500%
0%
-500%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Cash and Equivalents
Cash Sequential Growth %
Cash as % of Total Assets

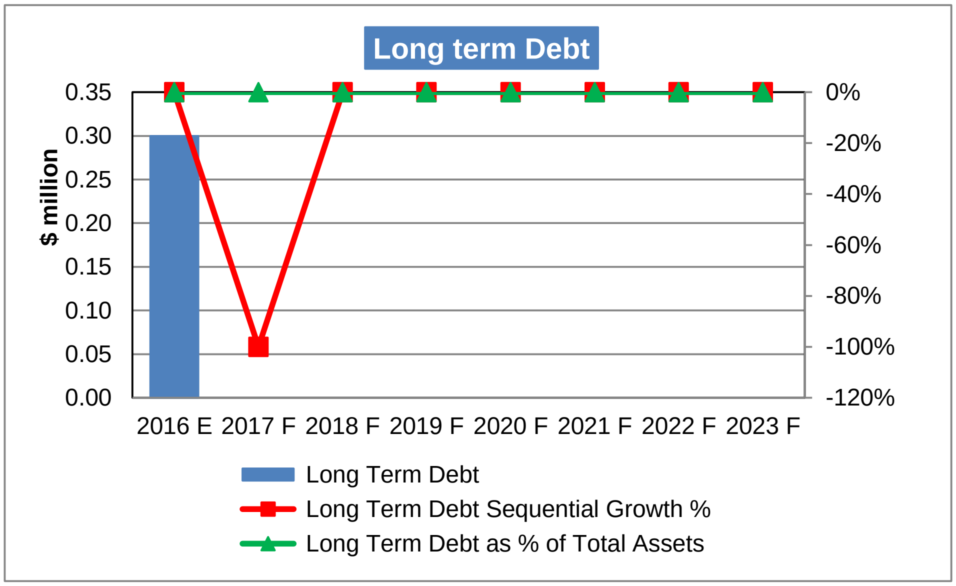

Total Current Assets
$ million
160
140
120
100
80
60
40
20
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F

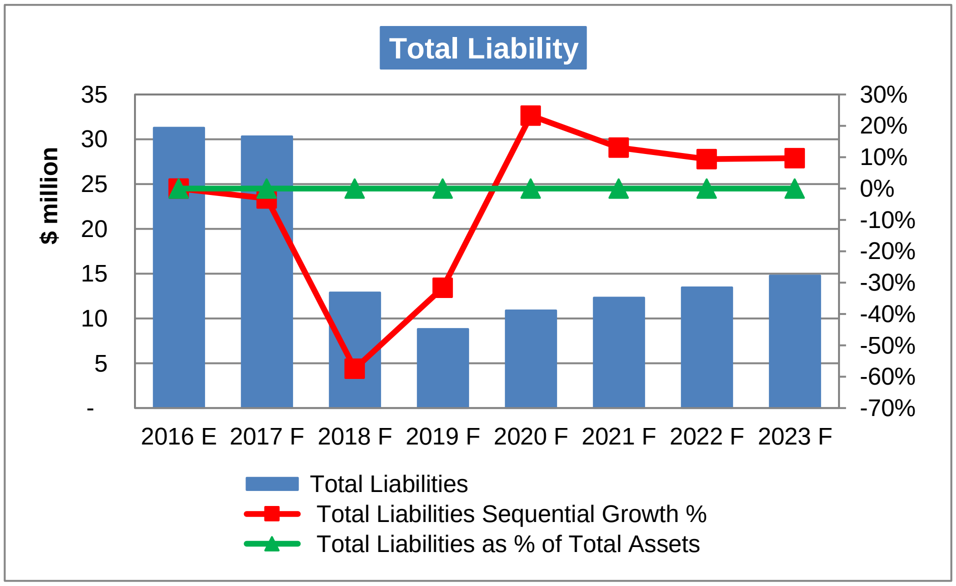

Net Fixed Assets
$ million
30
25
20
15
10
5
-
70%
60%
50%
40%
30%
20%
10%
0%
-10%
-20%
-30%
-40%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Net Fixed Assets
Net Fixed Assets Sequential Growth %
Net Fixed Assets as % of Total Assets

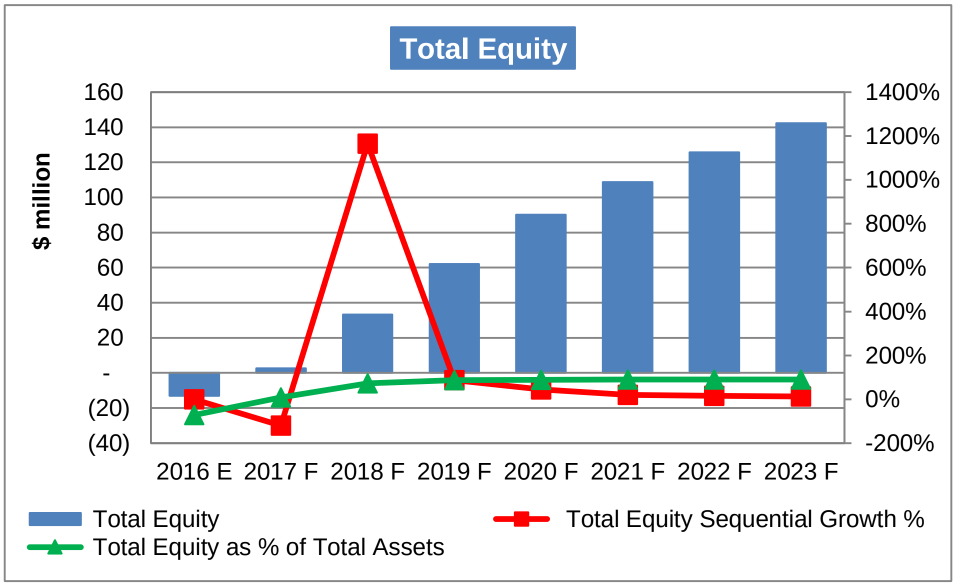

Accounts Payable
$ million
25
20
15
10
5
-
60%
40%
20%
0%
-20%
-40%
-60%
-80%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Accounts Payable
Accounts Payable Sequential Growth %
Accounts Payable as % of Total Assets

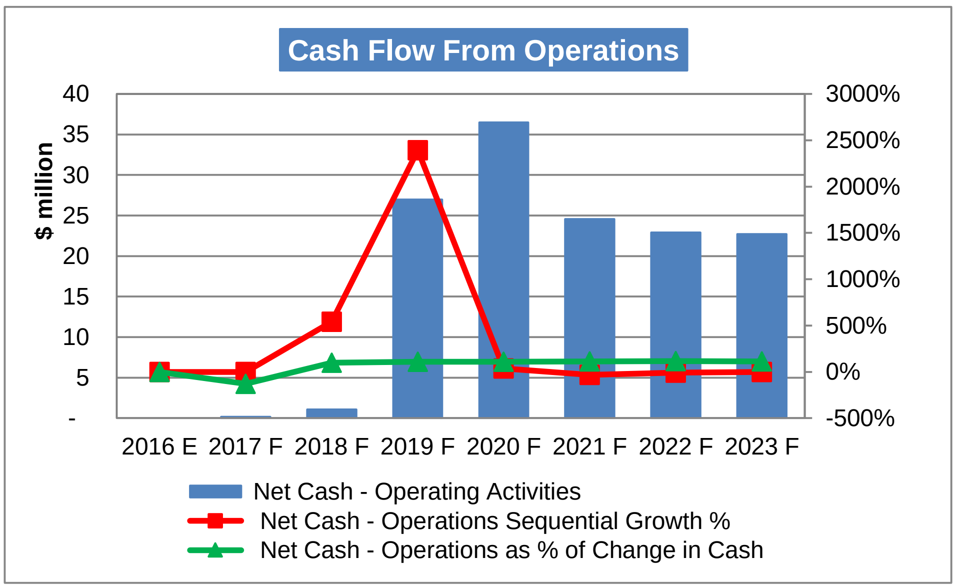

Debt Payable
$ million
14
12
10
8
6
4
2
-
20%
10%
0%
-10%
-20%
-30%
-40%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Debt Payable
Debt Payable Sequential Growth %
Debt Payable as % of Total Assets

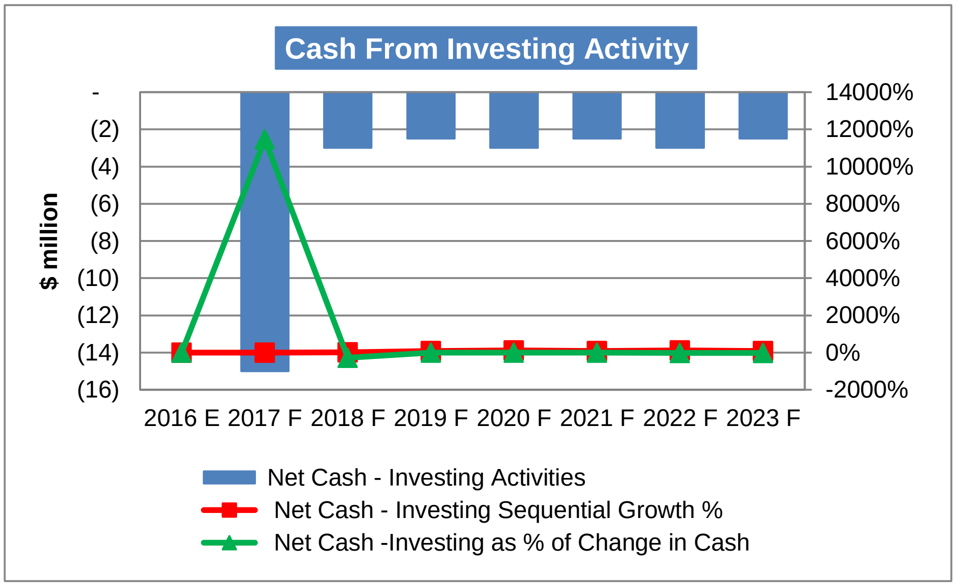

Total Current Liability
$ million
35
30
25
20
15
10
5
-
30%
20%
10%
0%
-10%
-20%
-30%
-40%
-50%
-60%
-70%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Total Current Liabilities
Current Liabilities Sequential Growth %
Current Liabilities as % of Total Assets

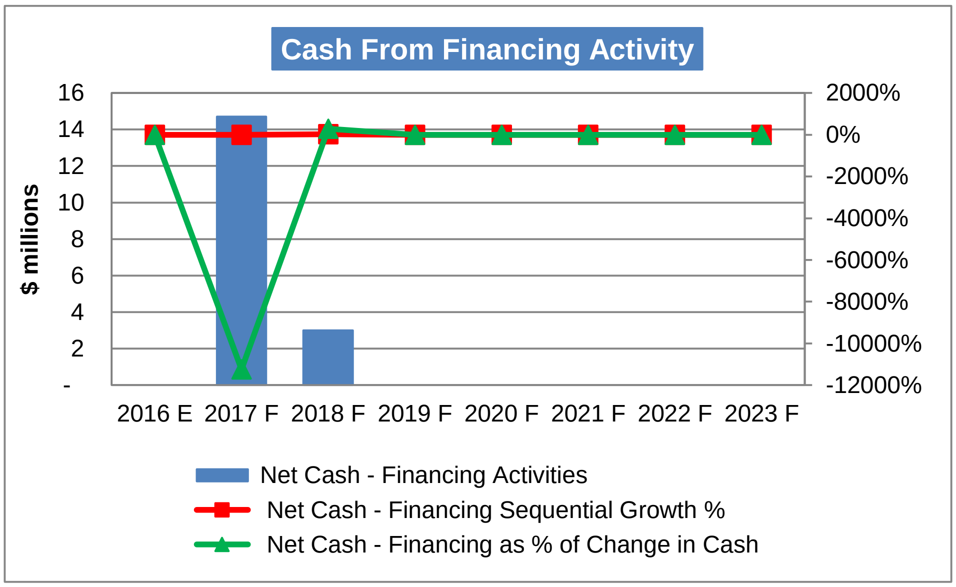

Long term Debt
$ million
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0%
-20%
-40%
-60%
-80%
-100%
-120%
2016 E 2017 F 2018 F 2019 F 2020 F 2021 F 2022 F 2023 F
Long Term Debt
Long Term Debt Sequential Growth %
Long Term Debt as % of Total Assets

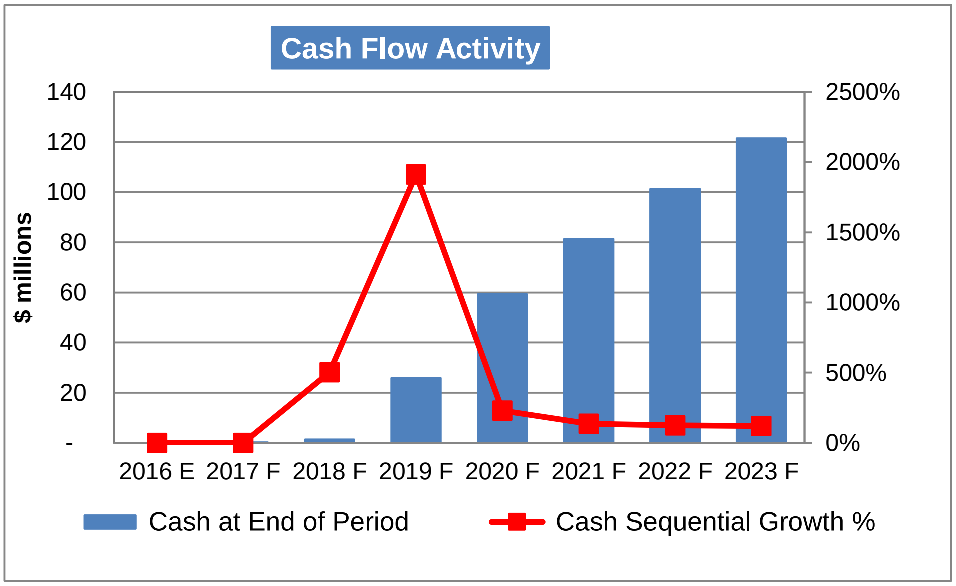

Total Liability
$ million
35
30
25
20
15
10
5
-
30%
20%
10%
0%
-10%
-20%
-30%
-40%
-50%
-60%
-70%
2016 E 2017 F 2018 F 2019 F 2020 F 2021 F 2022 F 2023 F
Total Liabilities
Total Liabilities Sequential Growth %
Total Liabilities as % of Total Assets


Total Equity
$ million
160
140
120
100
80
60
40
20
-
(20)
(40)
1400%
1200%
1000%
800%
600%
400%
200%
0%
-200%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Total Equity
Total Equity Sequential Growth %
Total Equity as % of Total Assets

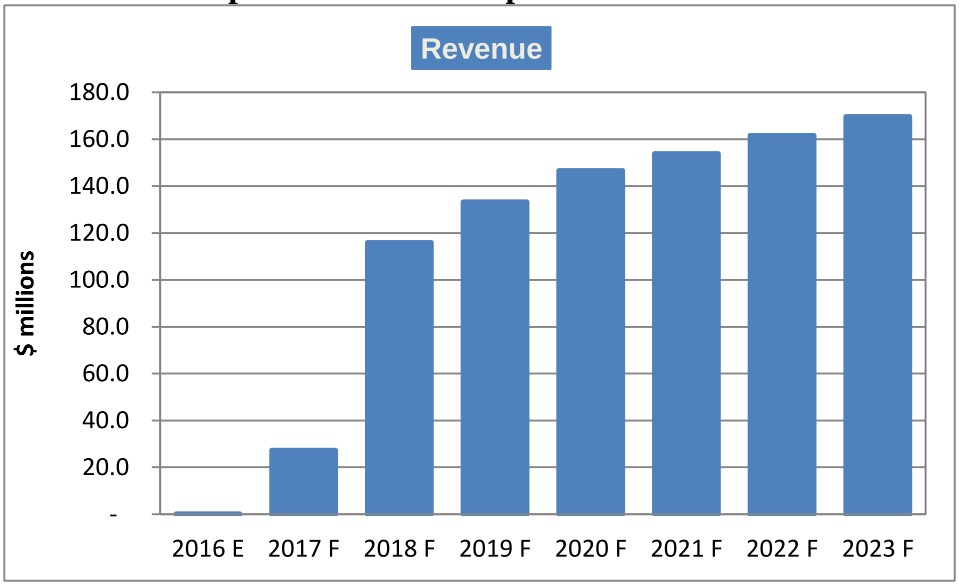

Cash Flow From Operations
$ million
40
35
30
25
20
15
10
5
-
3000%
2500%
2000%
1500%
1000%
500%
0%
-500%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Net Cash - Operating Activities
Net Cash - Operations Sequential Growth %
Net Cash - Operations as % of Change in Cash

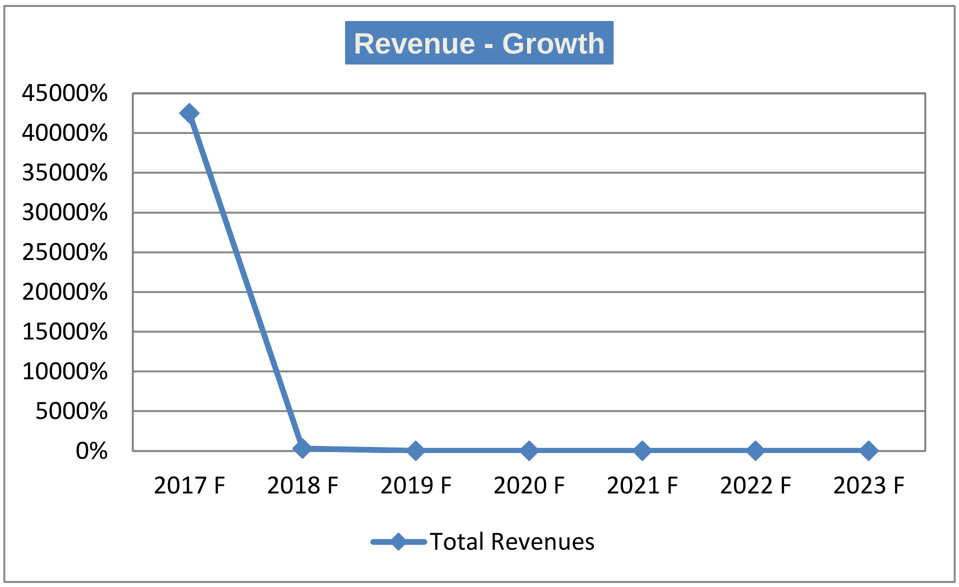

Cash From Investing Activity
$ million
-
(2)
(4)
(6)
(8)
(10)
(12)
(14)
(16)
14000%
12000%
10000%
8000%
6000%
4000%
2000%
0%
-2000%
2016 E 2017 F 2018 F 2019 F 2020 F 2021 F 2022 F 2023 F
Net Cash - Investing Activities
Net Cash - Investing Sequential Growth %
Net Cash -Investing as % of Change in Cash

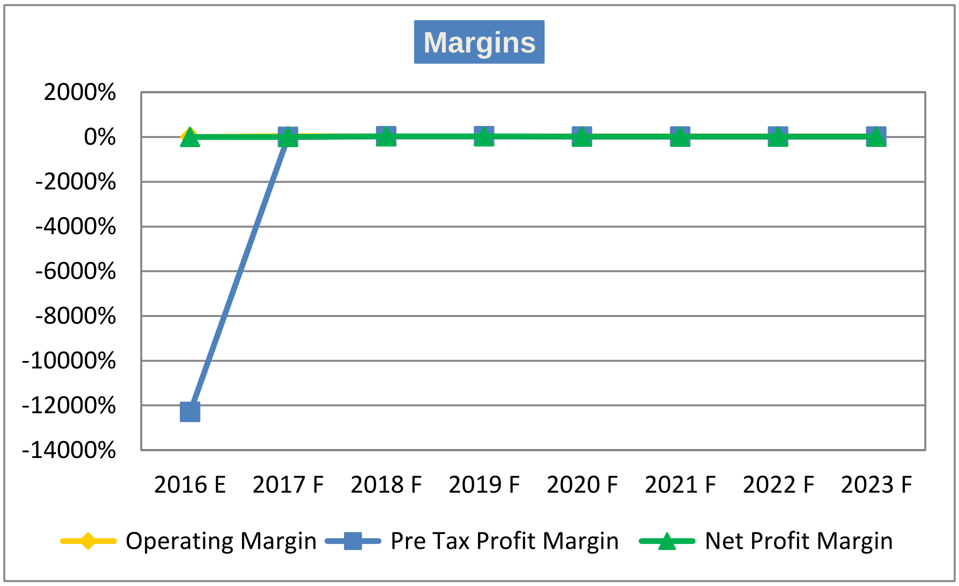

Cash From Financing Activity
$ millions
16
14
12
10
8
6
4
2
-
2000%
0%
-2000%
-4000%
-6000%
-8000%
-10000%
-12000%
2016 E 2017 F 2018 F 2019 F 2020 F 2021 F 2022 F 2023 F
Net Cash - Financing Activities
Net Cash - Financing Sequential Growth %
Net Cash - Financing as % of Change in Cash

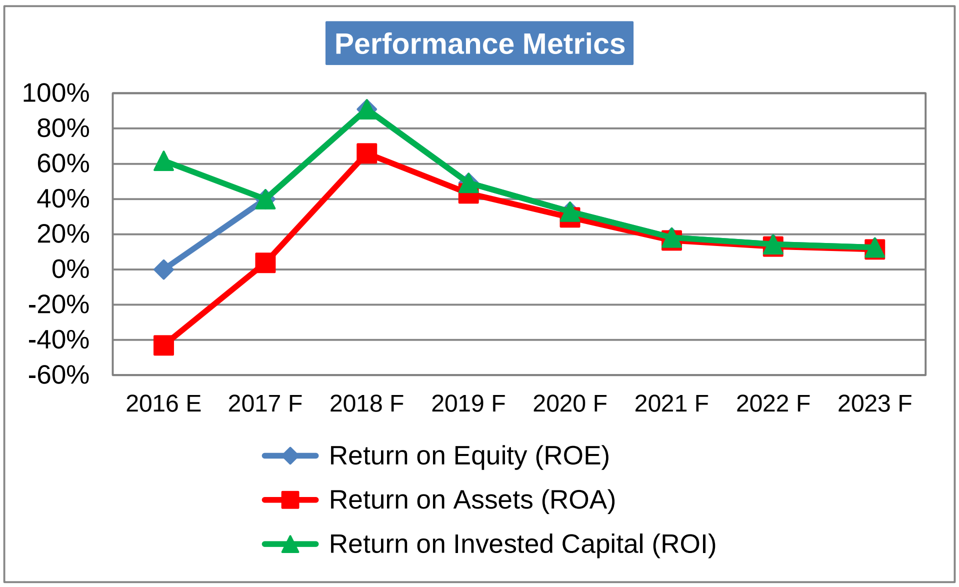

Cash Flow Activity
$ millions
140
120
100
80
60
40
20
-
2500%
2000%
1500%
1000%
500%
0%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Cash at End of Period
Cash Sequential Growth %

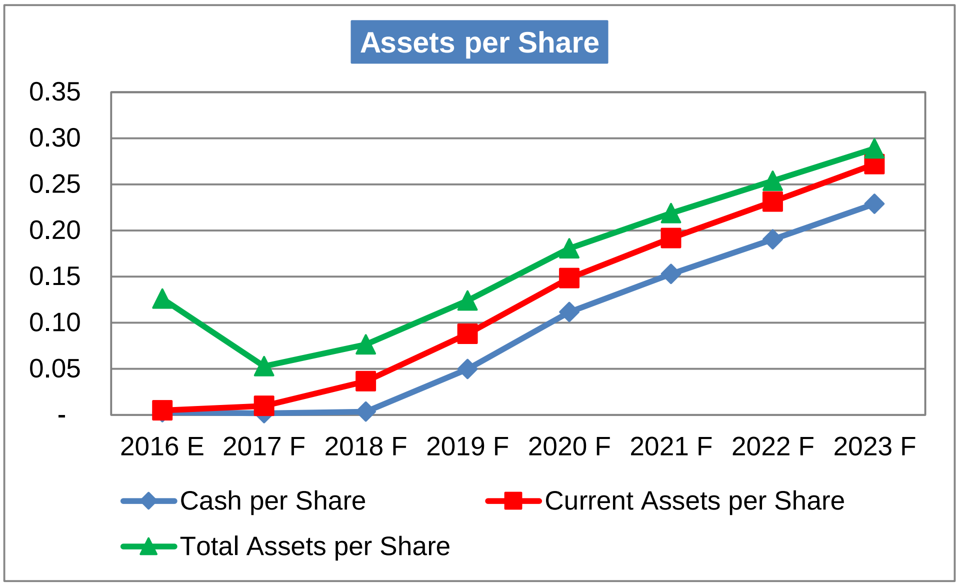
Optimistic Case Graphics and Charts

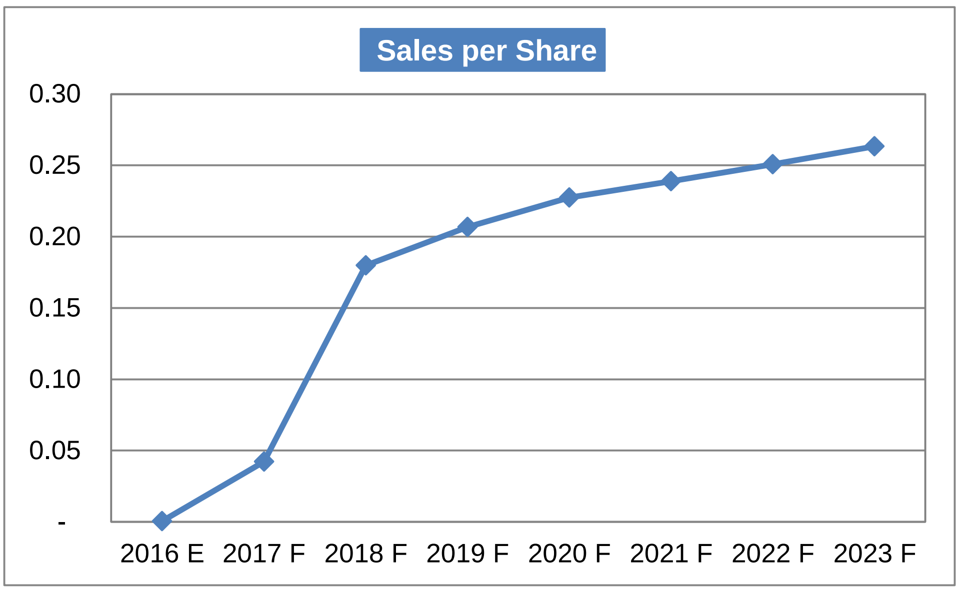


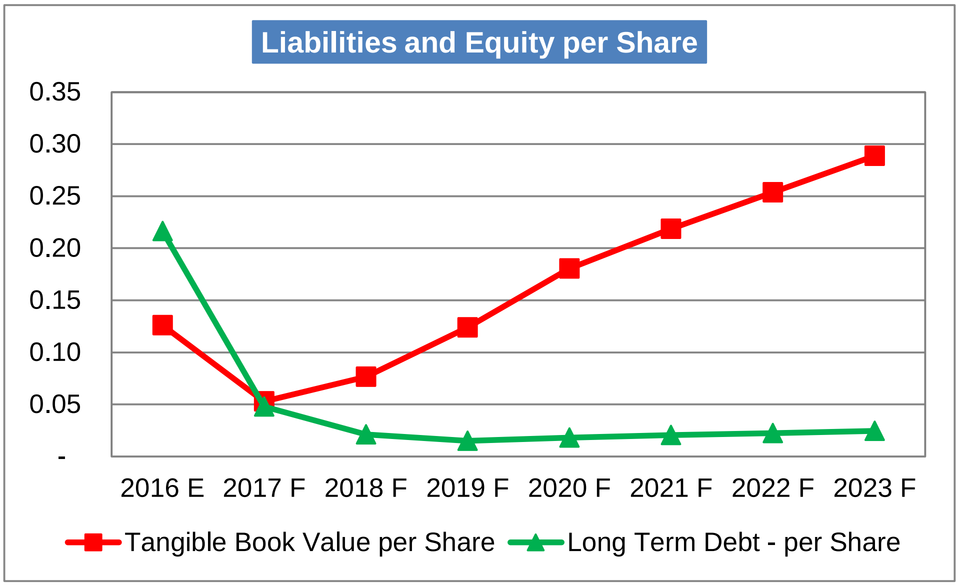


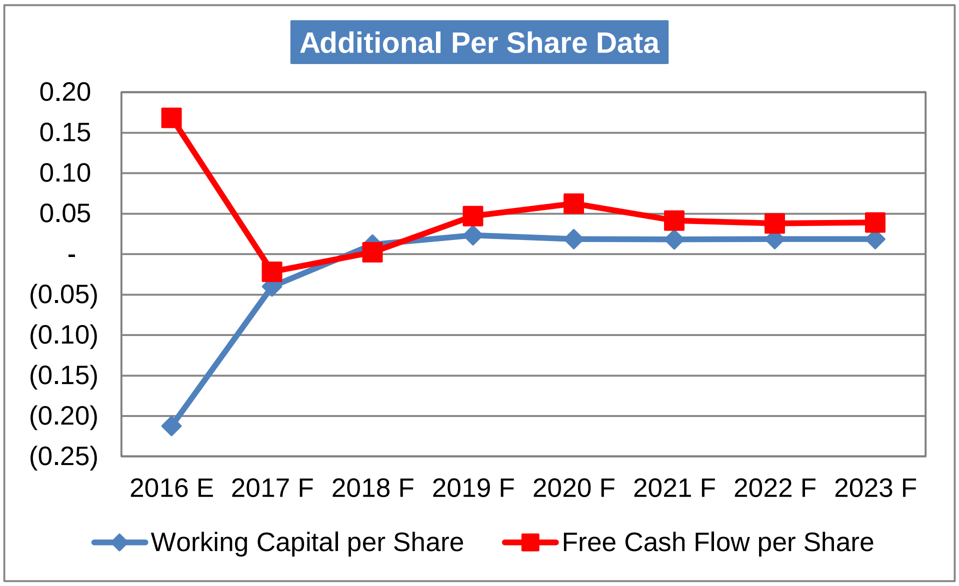

Margins
2000%
0%
-2000%
-4000%
-6000%
-8000%
-10000%
-12000%
-14000%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Operating Margin
Pre Tax Profit Margin
Net Profit Margin


Performance Metrics
100%
80%
60%
40%
20%
0%
-20%
-40%
-60%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Return on Equity (ROE)
Return on Assets (ROA)
Return on Invested Capital (ROI)

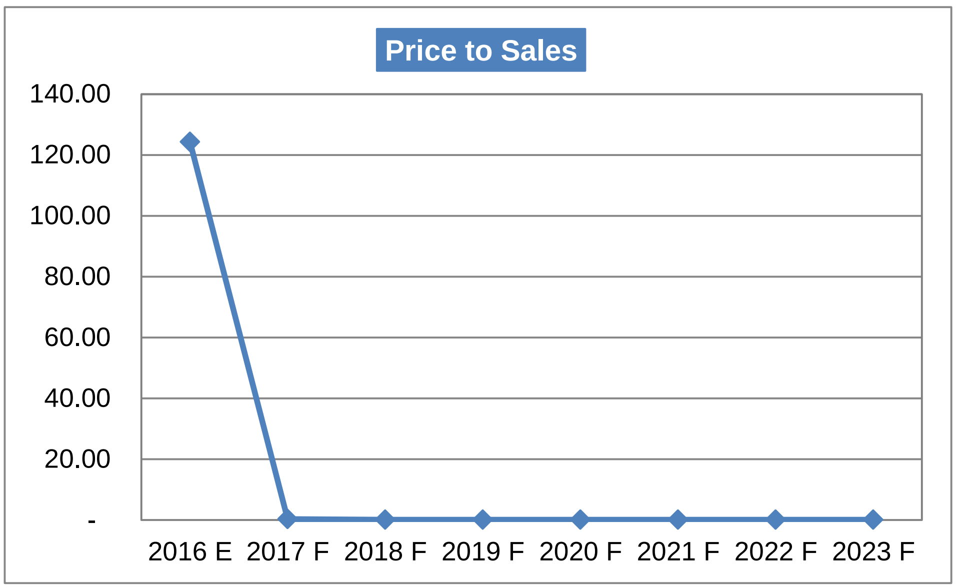

Assets per Share
0.35
0.30
0.25
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Cash per Share
Current Assets per Share
Total Assets per Share

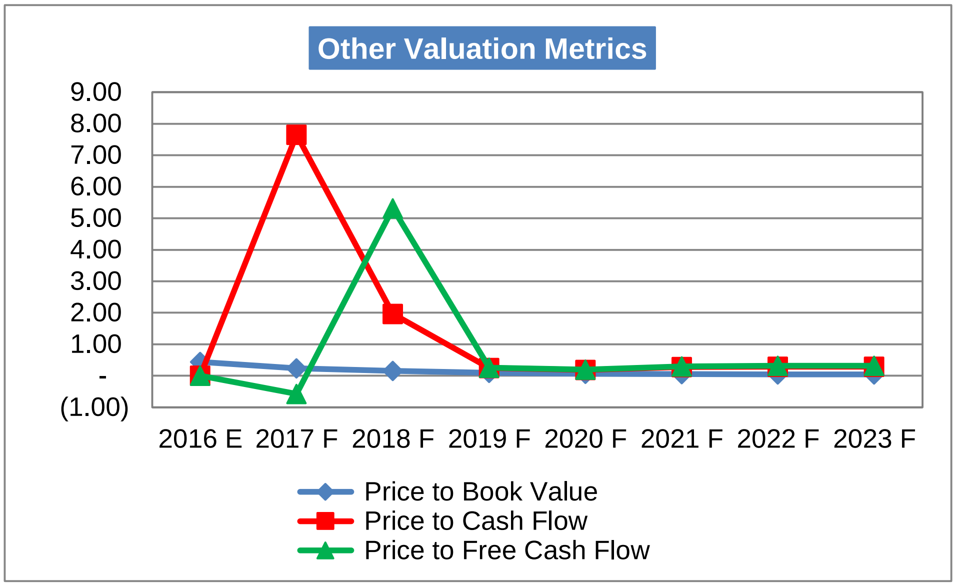

Sales per Share
0.30
0.25
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F

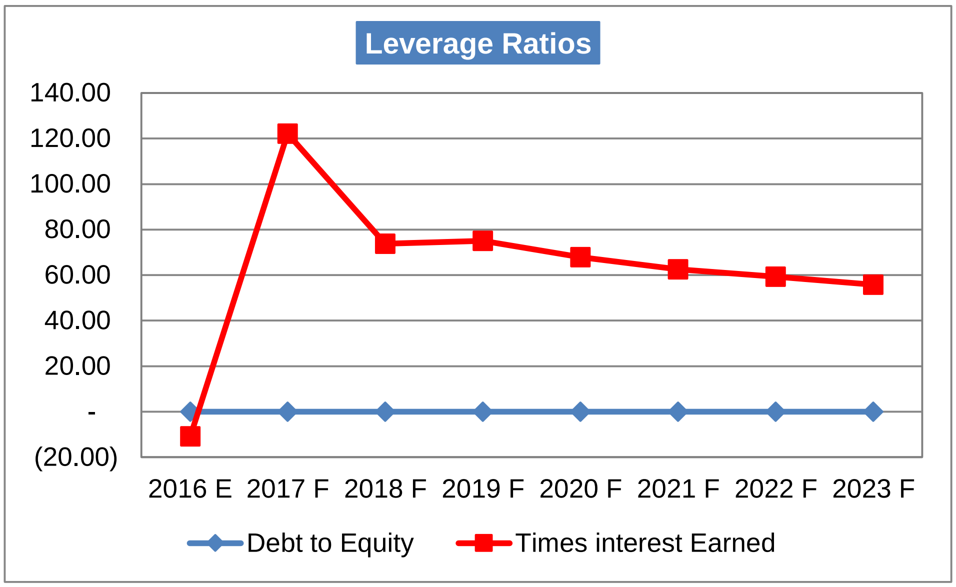

Liabilities and Equity per Share
0.35
0.30
0.25
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Tangible Book Value per Share
Long Term Debt - per Share

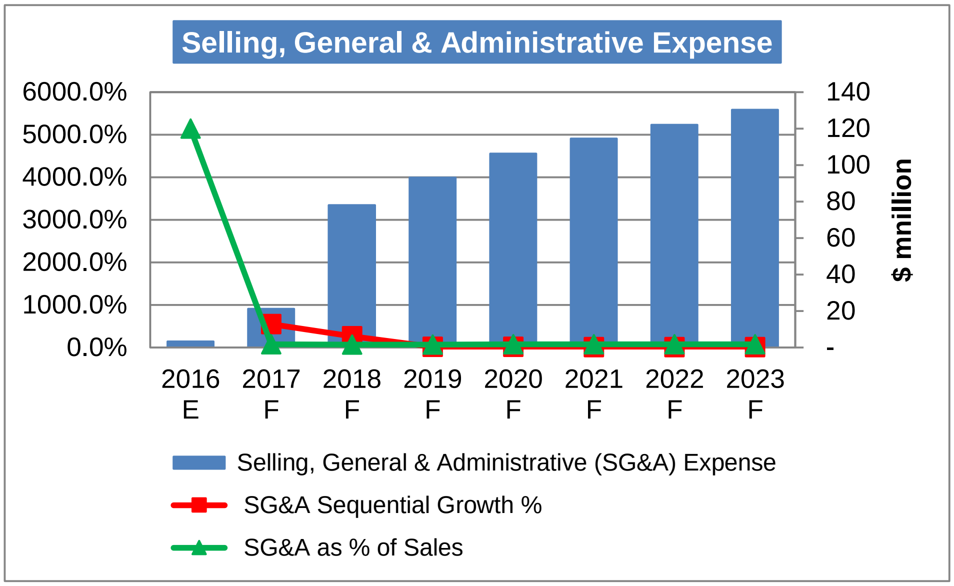

Additional Per Share Data
0.20
0.15
0.10
0.05
-
(0.05)
(0.10)
(0.15)
(0.20)
(0.25)
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Working Capital per Share
Free Cash Flow per Share

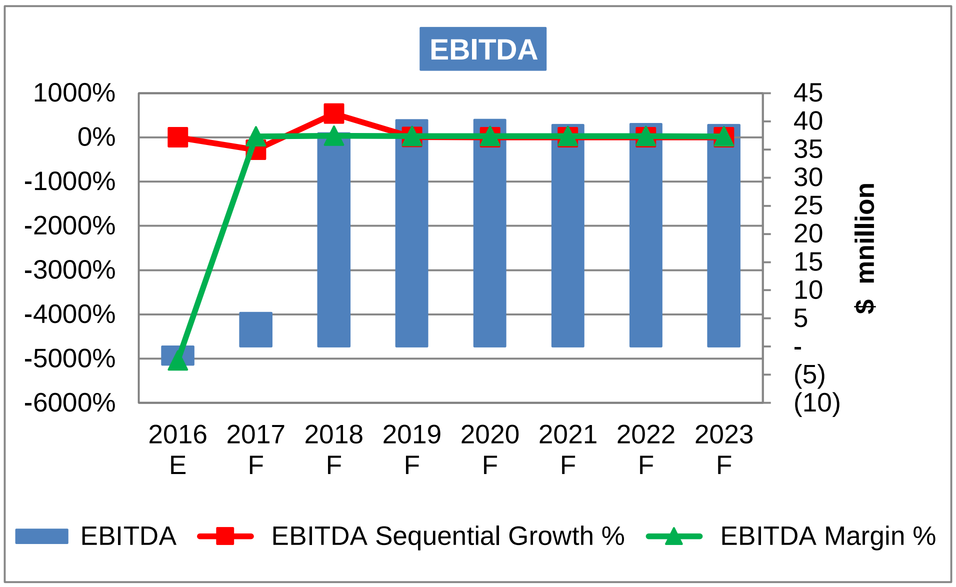

Price to Earnings
30.00
25.00
20.00
15.00
10.00
5.00
-
(5.00)
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F

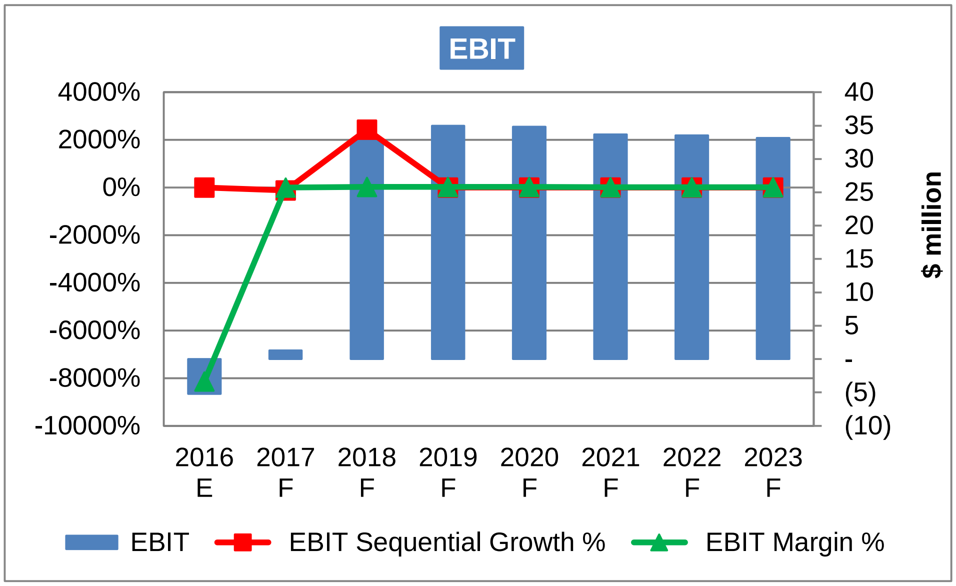

Price to Sales
140.00
120.00
100.00
80.00
60.00
40.00
20.00
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F

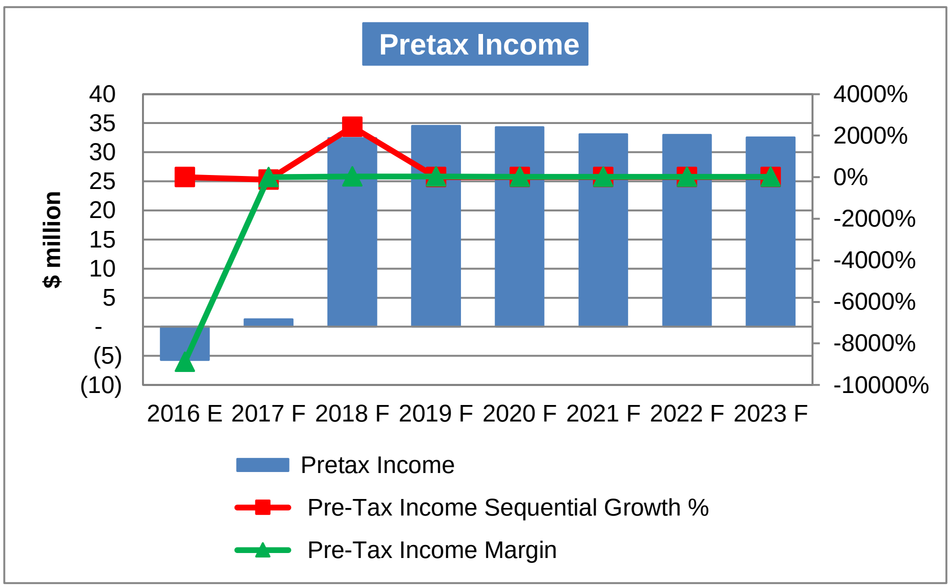

Other Valuation Metrics
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
-
(1.00)
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Price to Book Value
Price to Cash Flow
Price to Free Cash Flow

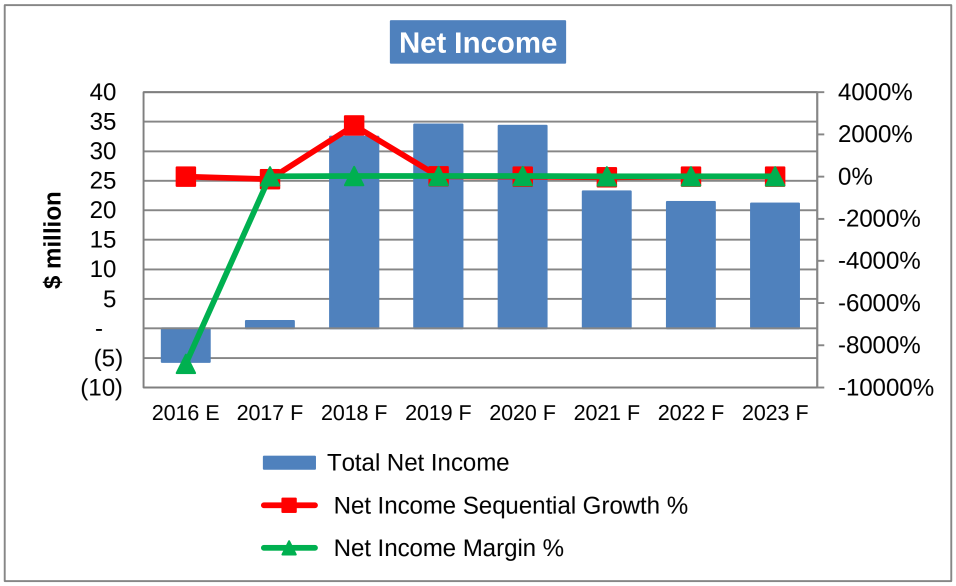

Leverage Ratios
140.00
120.00
100.00
80.00
60.00
40.00
20.00
-
(20.00)
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Debt to Equity
Times interest Earned

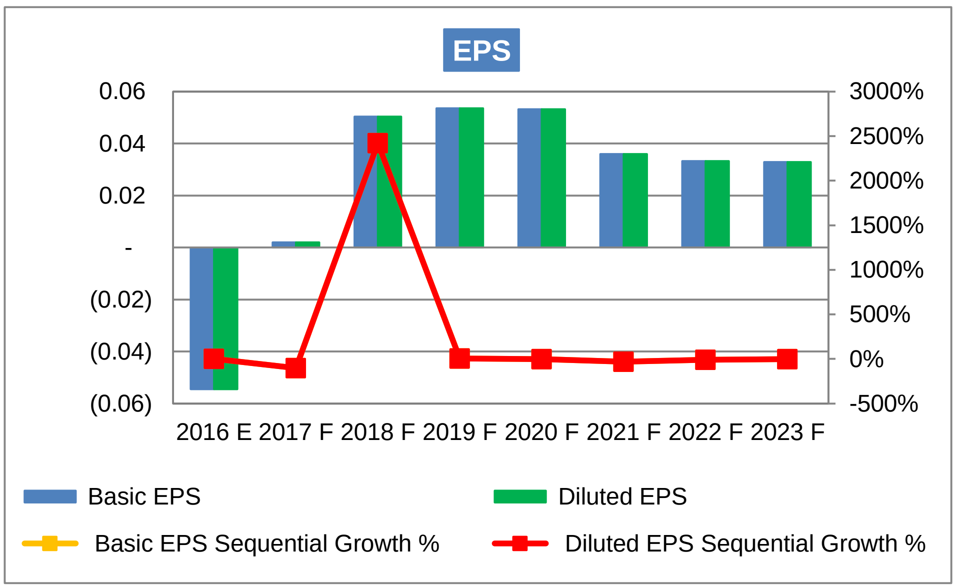

Selling, General & Administrative Expense
6000.0%
5000.0%
4000.0%
3000.0%
2000.0%
1000.0%
0.0%
140
120
100
80
60
40
20
-
$ mnillion
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Selling, General & Administrative (SG&A) Expense
SG&A Sequential Growth %
SG&A as % of Sales

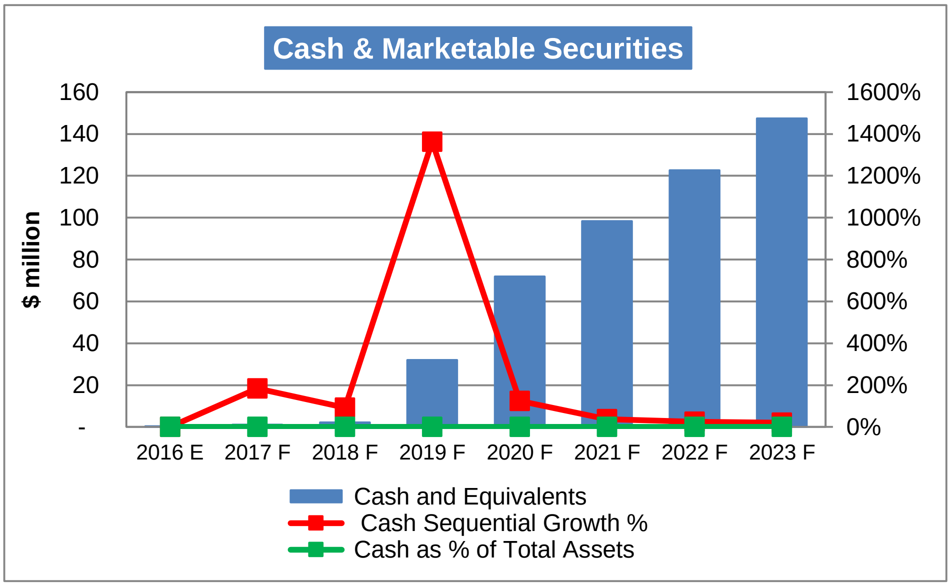

EBITDA
1000%
0%
-1000%
-2000%
-3000%
-4000%
-5000%
-6000%
45
40
35
30
25
20
15
10
5
-
(5)
(10)
$ mnillion
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
EBITDA
EBITDA Sequential Growth %
EBITDA Margin %

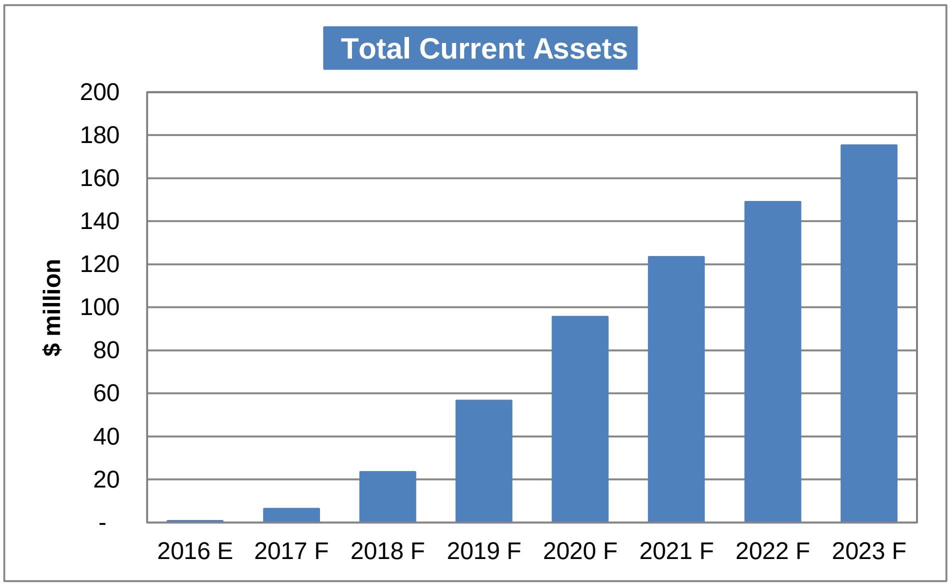

EBIT
4000%
2000%
0%
-2000%
-4000%
-6000%
-8000%
-10000%
40
35
30
25
20
15
10
5
-
(5)
(10)
$ million
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
EBIT
EBIT Sequential Growth %
EBIT Margin %

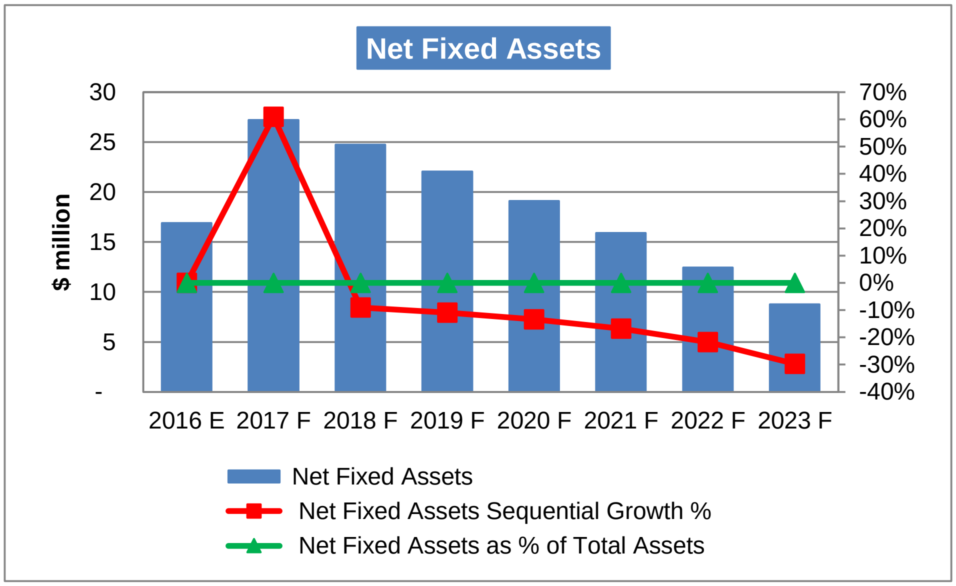

Pretax Income
$ million
40
35
30
25
20
15
10
5
-
(5)
(10)
4000%
2000%
0%
-2000%
-4000%
-6000%
-8000%
-10000%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Pretax Income
Pre-Tax Income Sequential Growth %
Pre-Tax Income Margin

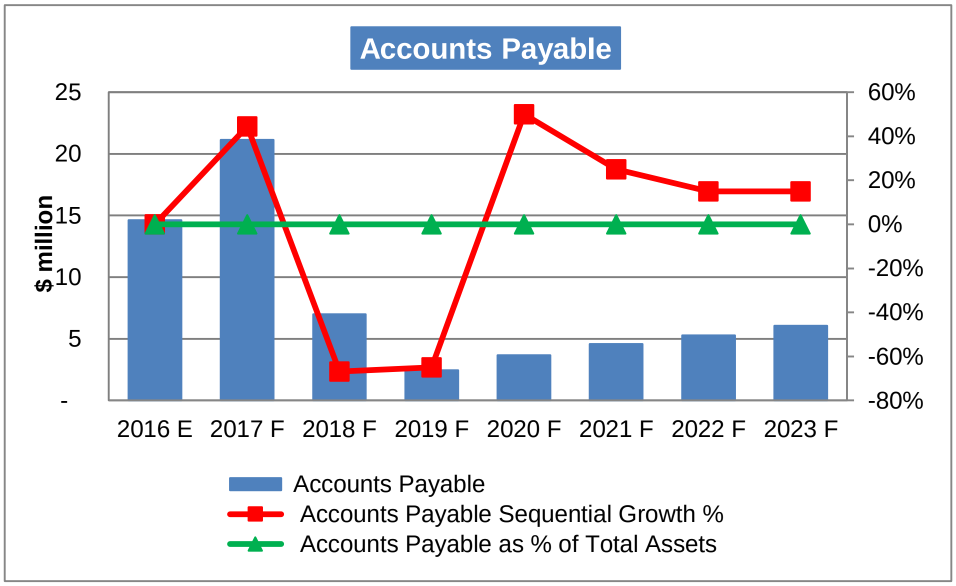

Net Income
$ million
40
35
30
25
20
15
10
5
-
(5)
(10)
4000%
2000%
0%
-2000%
-4000%
-6000%
-8000%
-10000%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Total Net Income
Net Income Sequential Growth %
Net Income Margin %

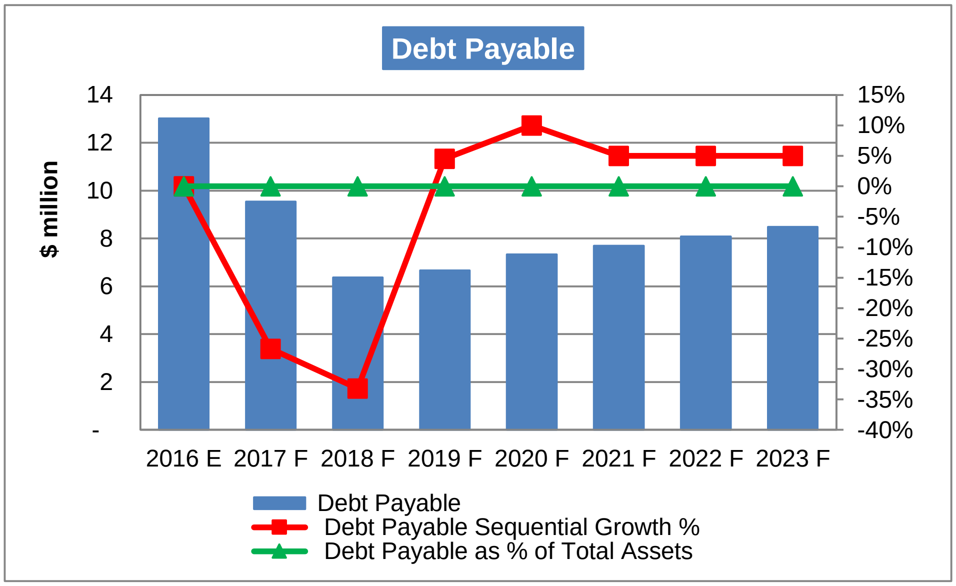

EPS
0.06
0.04
0.02
-
(0.02)
(0.04)
(0.06)
3000%
2500%
2000%
1500%
1000%
500%
0%
-500%
2016 E 2017 F 2018 F 2019 F 2020 F 2021 F 2022 F 2023 F
Basic EPS
Diluted EPS
Basic EPS Sequential Growth %
Diluted EPS Sequential Growth %

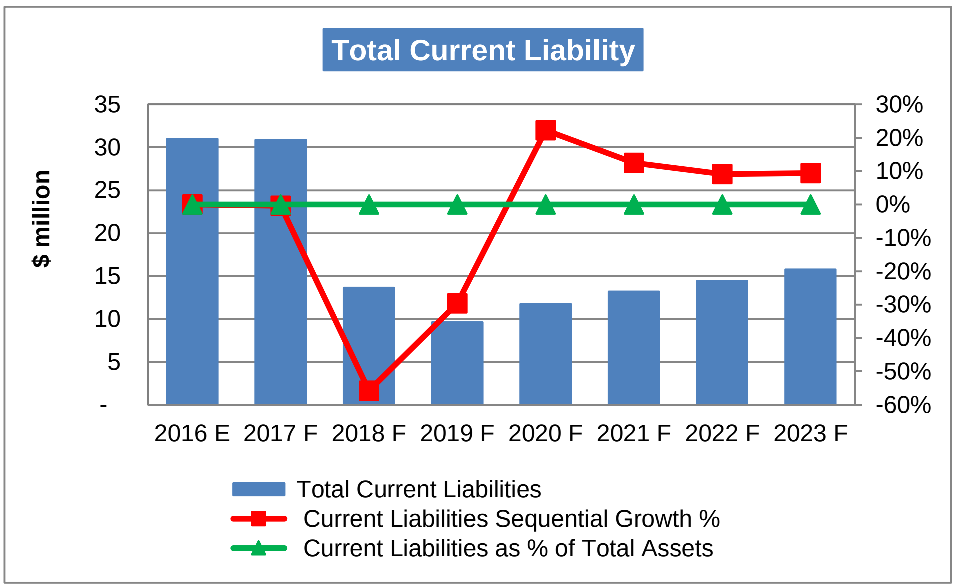

Cash & Marketable Securities
$ million
160
140
120
100
80
60
40
20
-
1600%
1400%
1200%
1000%
800%
600%
400%
200%
0%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Cash and Equivalents
Cash Sequential Growth %
Cash as % of Total Assets

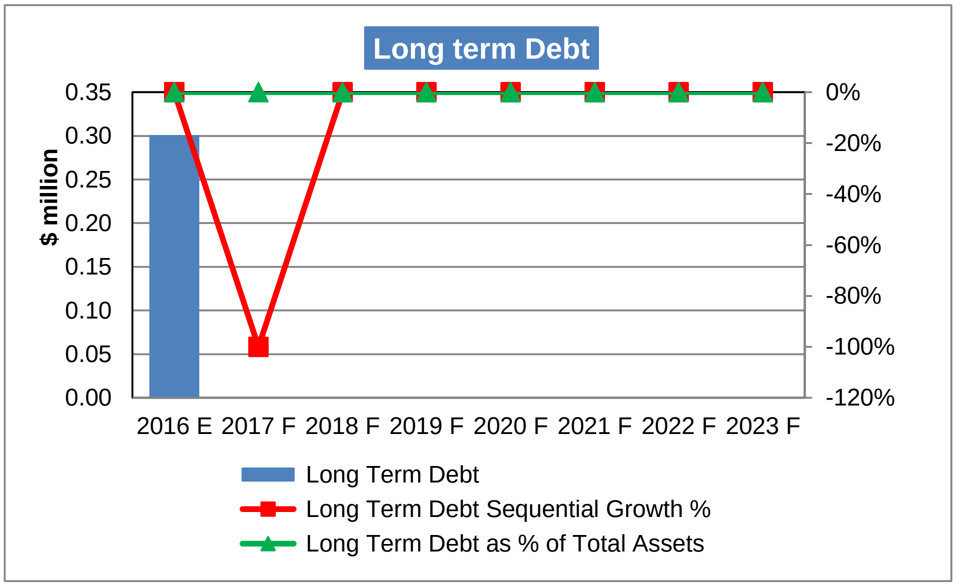

Total Current Assets
$ million
200
180
160
140
120
100
80
60
40
20
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F

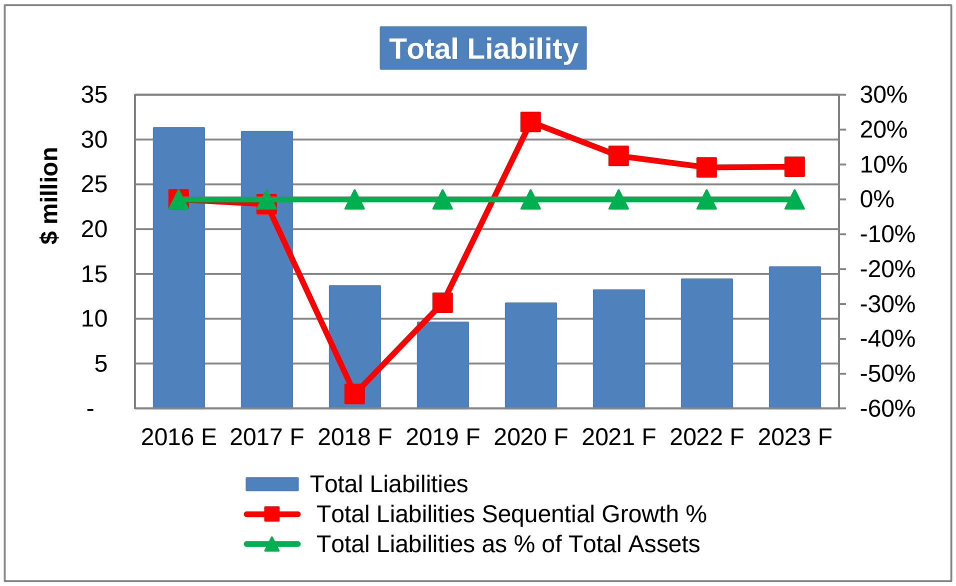

Net Fixed Assets
$ million
30
25
20
15
10
5
-
70%
60%
50%
40%
30%
20%
10%
0%
-10%
-20%
-30%
-40%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Net Fixed Assets
Net Fixed Assets Sequential Growth %
Net Fixed Assets as % of Total Assets

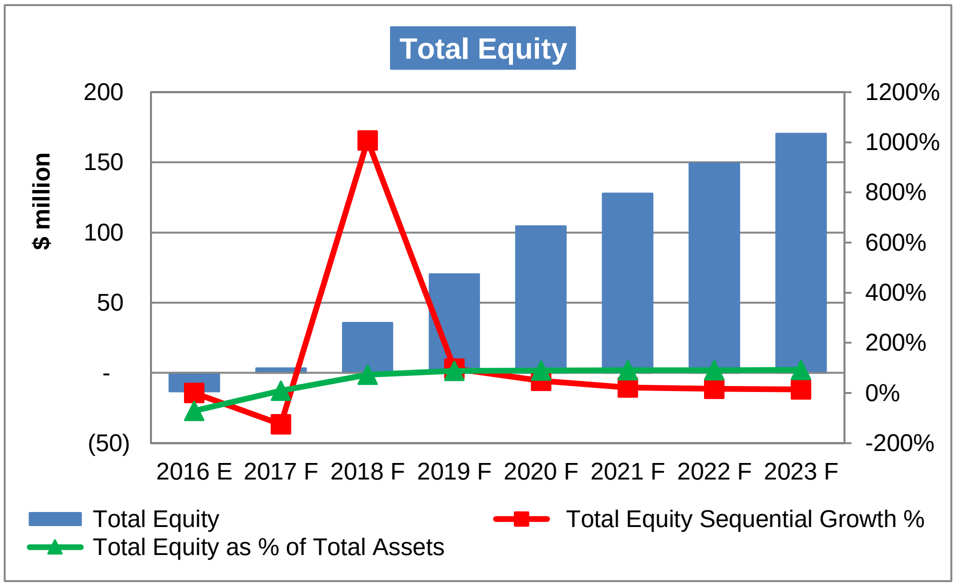

Accounts Payable
$ million
25
20
15
10
5
-
60%
40%
20%
0%
-20%
-40%
-60%
-80%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Accounts Payable
Accounts Payable Sequential Growth %
Accounts Payable as % of Total Assets

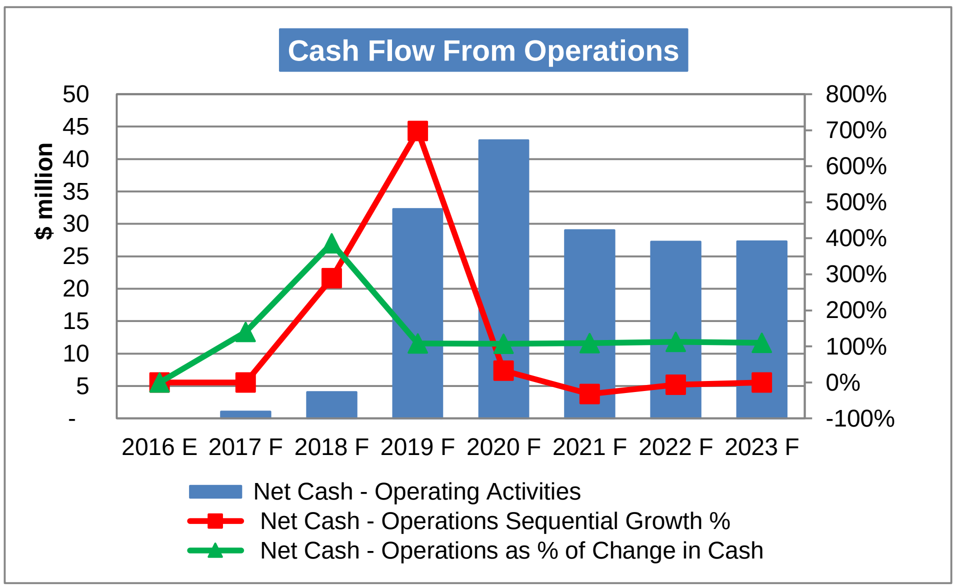

Debt Payable
$ million
14
12
10
8
6
4
2
-
15%
10%
5%
0%
-5%
-10%
-15%
-20%
-25%
-30%
-35%
-40%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Debt Payable
Debt Payable Sequential Growth %
Debt Payable as % of Total Assets

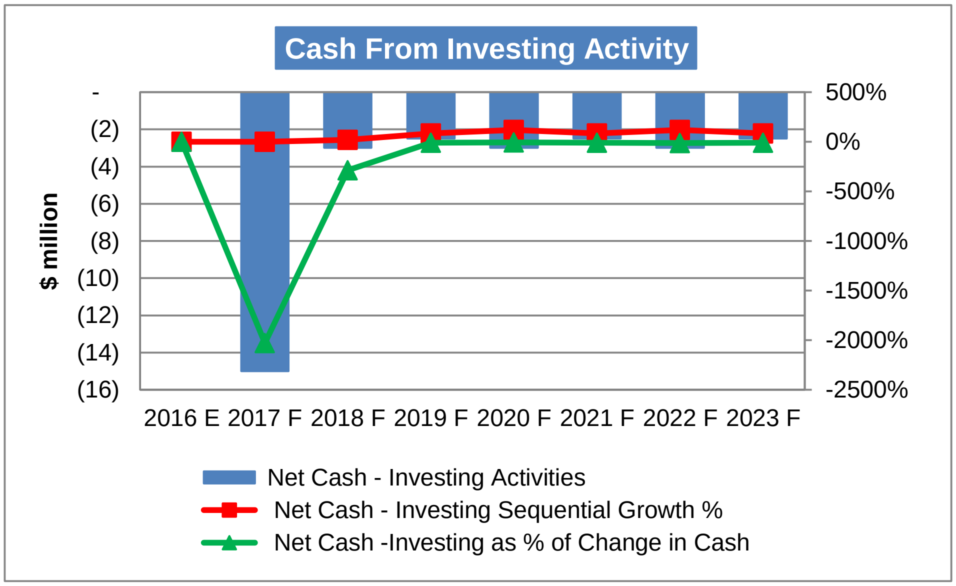

Total Current Liability
$ million
35
30
25
20
15
10
5
-
30%
20%
10%
0%
-10%
-20%
-30%
-40%
-50%
-60%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Total Current Liabilities
Current Liabilities Sequential Growth %
Current Liabilities as % of Total Assets

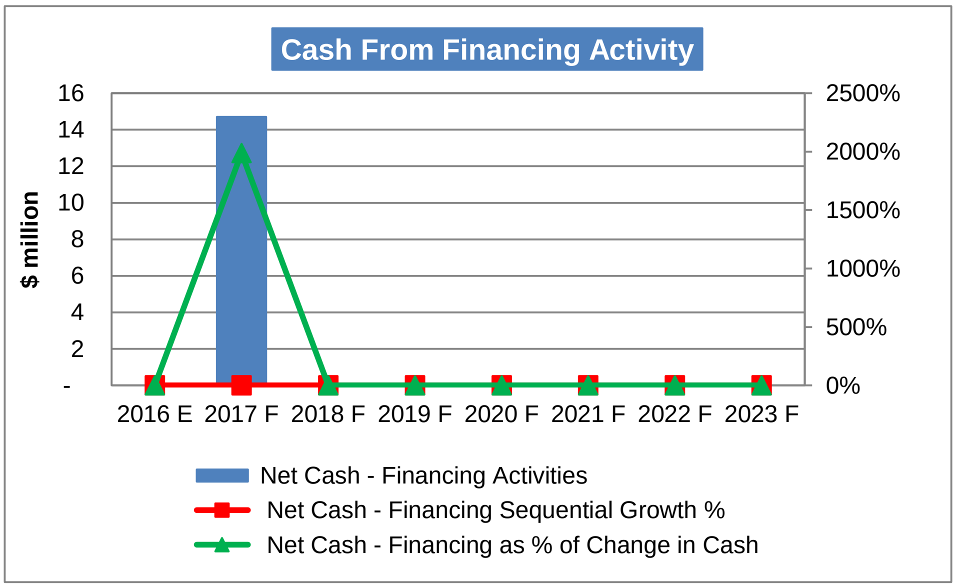

Long term Debt
$ million
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0%
-20%
-40%
-60%
-80%
-100%
-120%
2016 E 2017 F 2018 F 2019 F 2020 F 2021 F 2022 F 2023 F
Long Term Debt
Long Term Debt Sequential Growth %
Long Term Debt as % of Total Assets

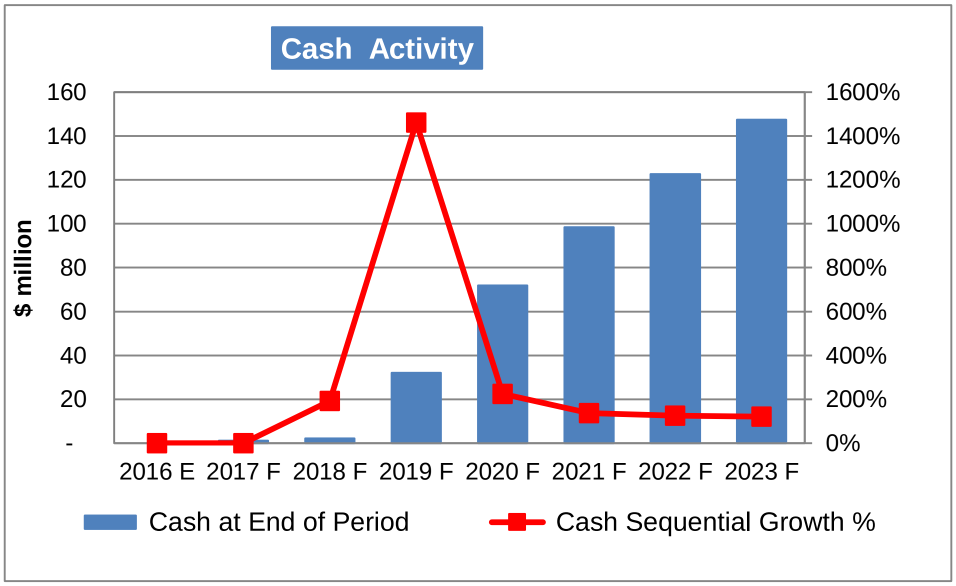

Total Liability
$ million
35
30
25
20
15
10
5
-
30%
20%
10%
0%
-10%
-20%
-30%
-40%
-50%
-60%
2016 E 2017 F 2018 F 2019 F 2020 F 2021 F 2022 F 2023 F
Total Liabilities
Total Liabilities Sequential Growth %
Total Liabilities as % of Total Assets


Total Equity
$ million
200
150
100
50
-
(50)
1200%
1000%
800%
600%
400%
200%
0%
-200%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Total Equity
Total Equity Sequential Growth %
Total Equity as % of Total Assets

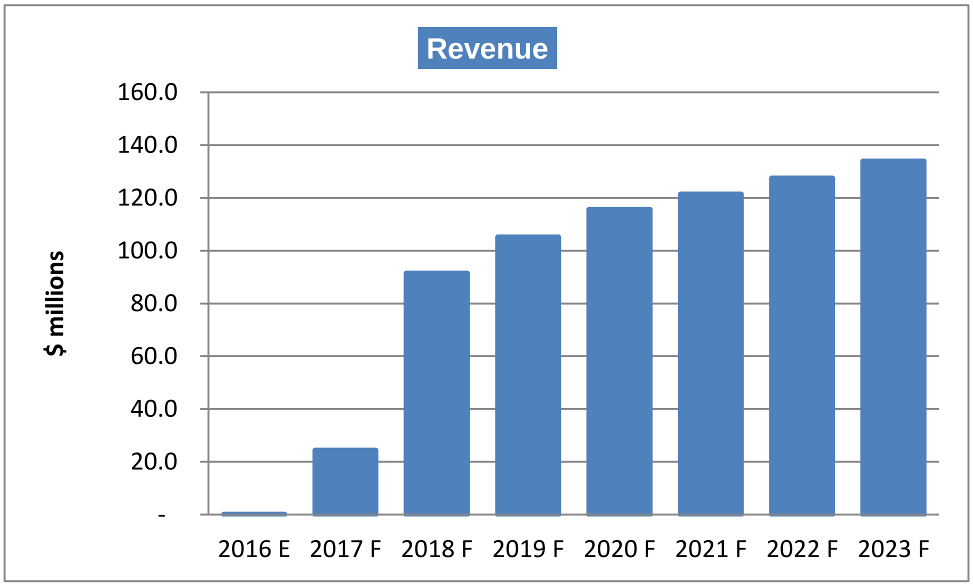

Cash Flow From Operations
$ million
50
45
40
35
30
25
20
15
10
5
-
800%
700%
600%
500%
400%
300%
200%
100%
0%
-100%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Net Cash - Operating Activities
Net Cash - Operations Sequential Growth %
Net Cash - Operations as % of Change in Cash

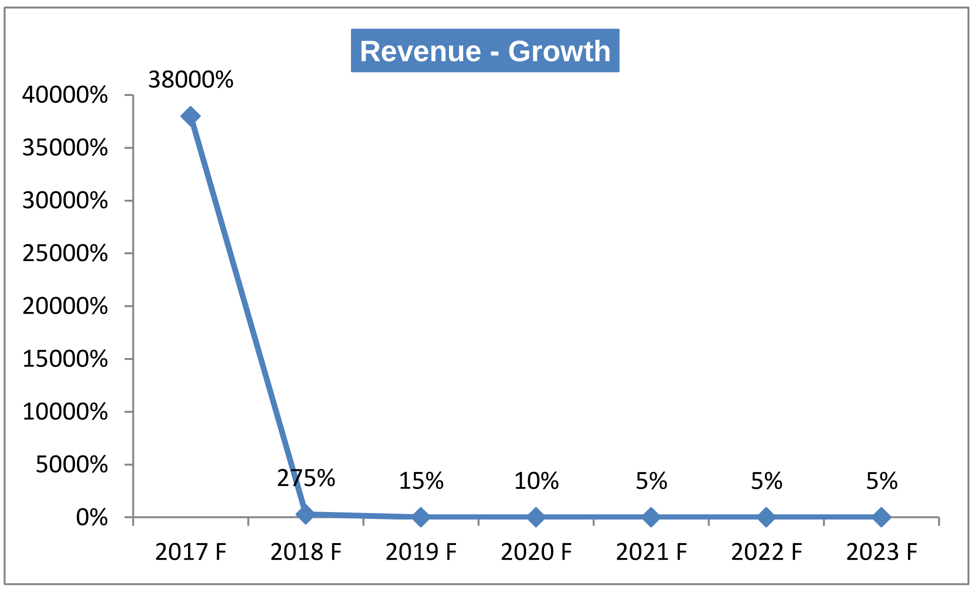

Cash From Investing Activity
$ million
-
(2)
(4)
(6)
(8)
(10)
(12)
(14)
(16)
500%
0%
-500%
-1000%
-1500%
-2000%
-2500%
2016 E 2017 F 2018 F 2019 F 2020 F 2021 F 2022 F 2023 F
Net Cash - Investing Activities
Net Cash - Investing Sequential Growth %
Net Cash -Investing as % of Change in Cash

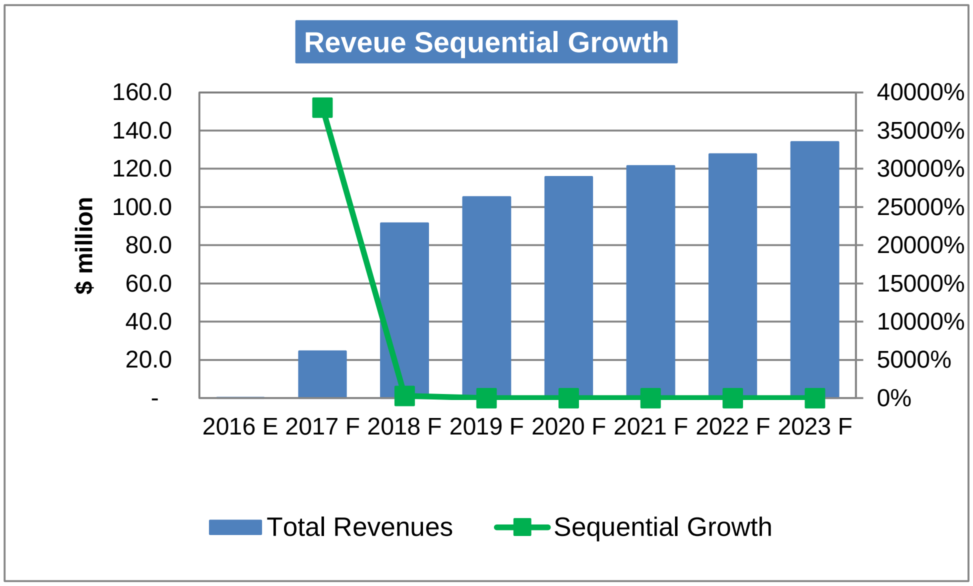

Cash From Financing Activity
$ million
16
14
12
10
8
6
4
2
-
2500%
2000%
1500%
1000%
500%
0%
2016 E 2017 F 2018 F 2019 F 2020 F 2021 F 2022 F 2023 F
Net Cash - Financing Activities
Net Cash - Financing Sequential Growth %
Net Cash - Financing as % of Change in Cash

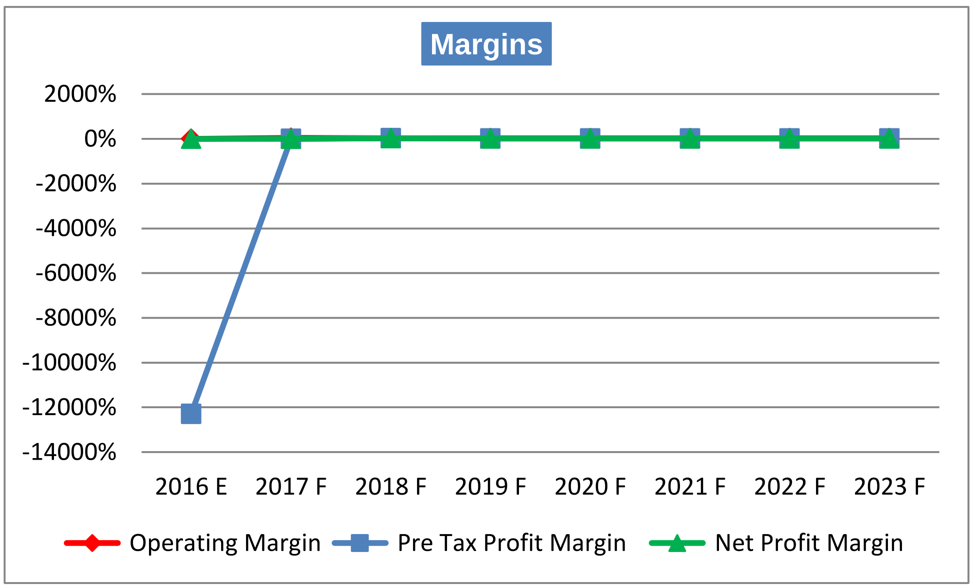

Cash Activity
$ million
160
140
120
100
80
60
40
20
-
1600%
1400%
1200%
1000%
800%
600%
400%
200%
0%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Cash at End of Period
Cash Sequential Growth %

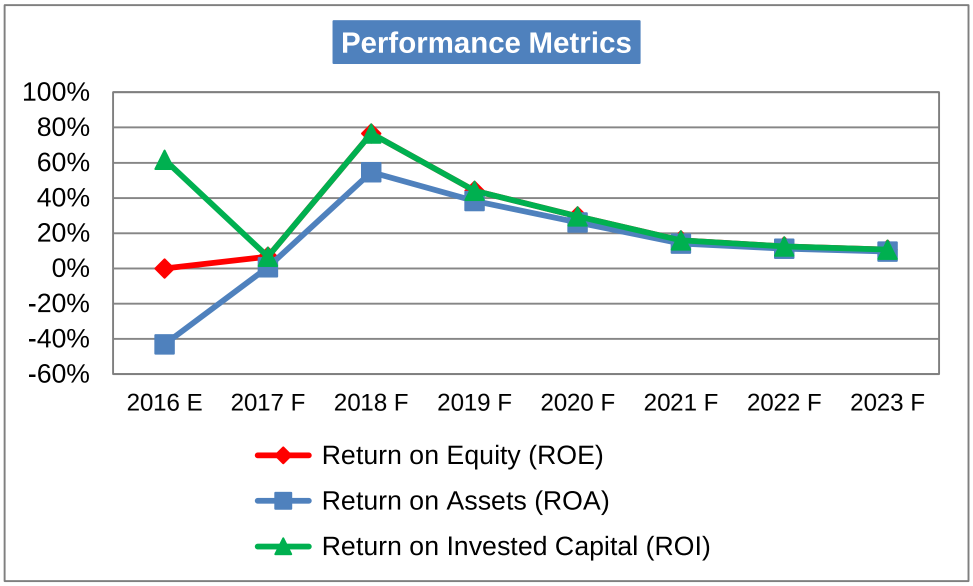
Pessimistic Case Graphics and Charts

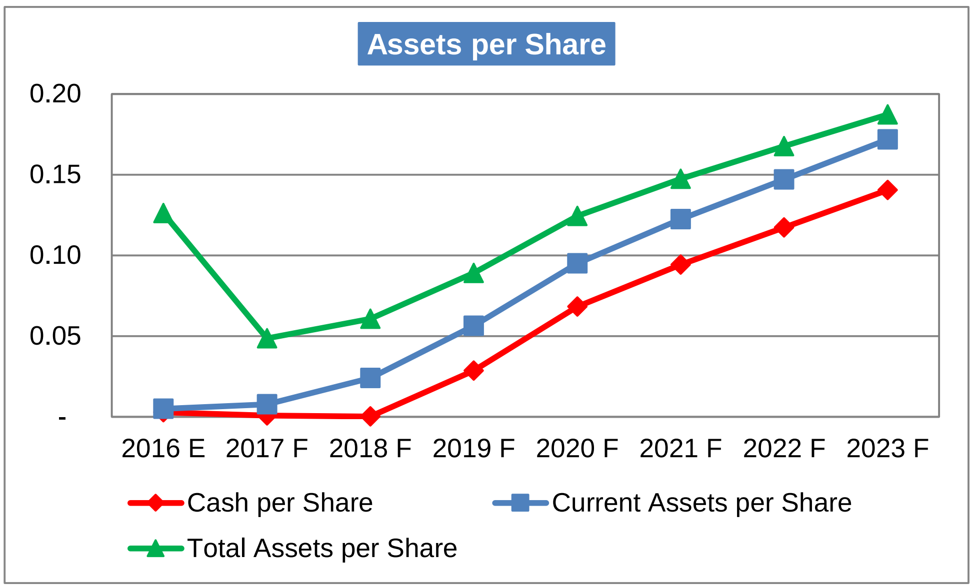


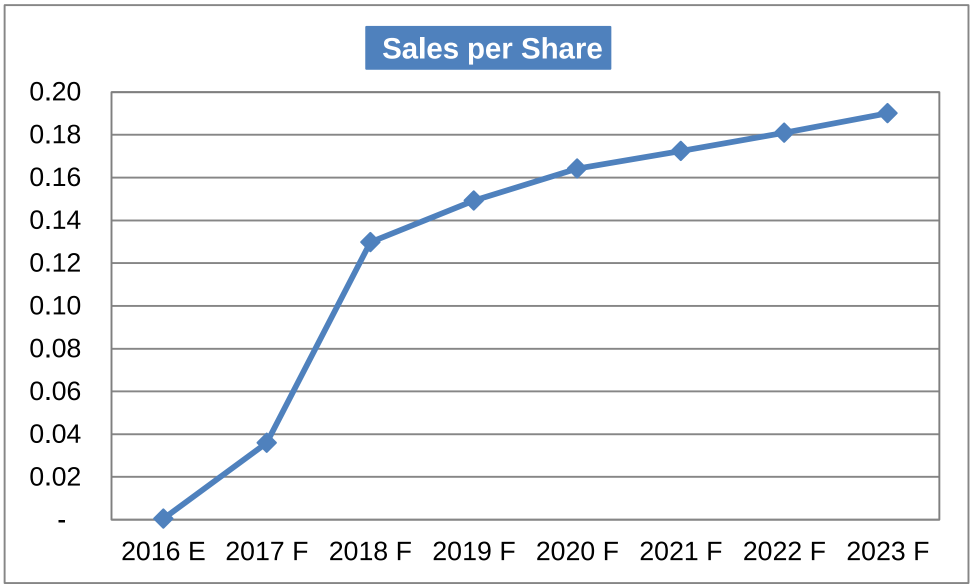


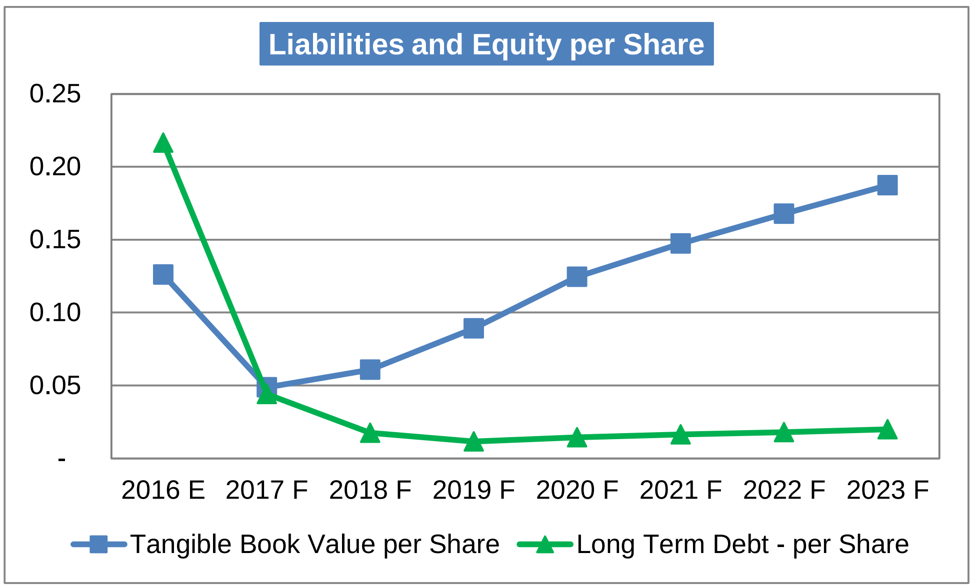

Reveue Sequential Growth
$ million
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
-
40000%
35000%
30000%
25000%
20000%
15000%
10000%
5000%
0%
2016 E 2017 F 2018 F 2019 F 2020 F 2021 F 2022 F 2023 F
Total Revenues
Sequential Growth

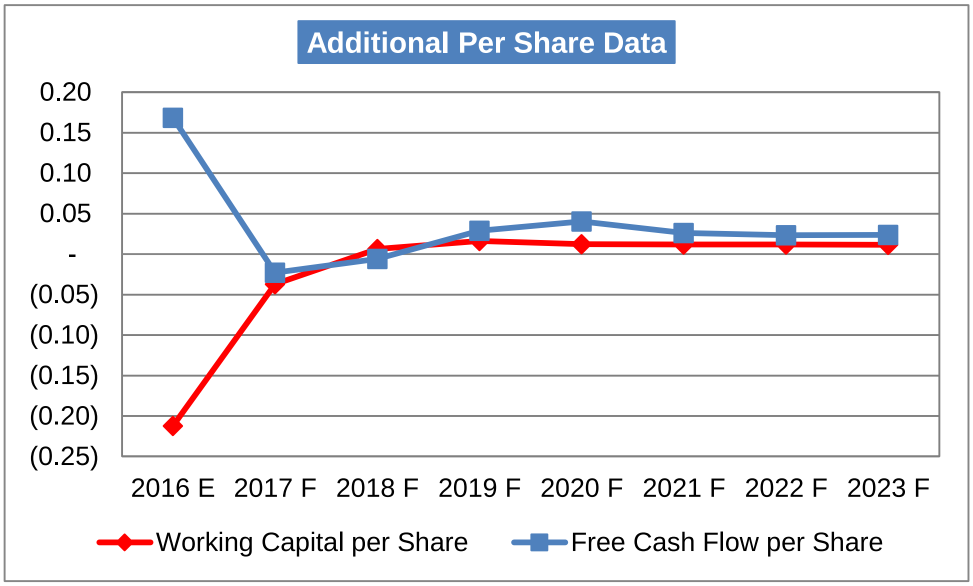

Margins
2000%
0%
-2000%
-4000%
-6000%
-8000%
-10000%
-12000%
-14000%
2016 E 2017 F 2018 F 2019 F 2020 F 2021 F 2022 F 2023 F
Operating Margin
Pre Tax Profit Margin
Net Profit Margin


Performance Metrics
100%
80%
60%
40%
20%
0%
-20%
-40%
-60%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Return on Equity (ROE)
Return on Assets (ROA)
Return on Invested Capital (ROI)

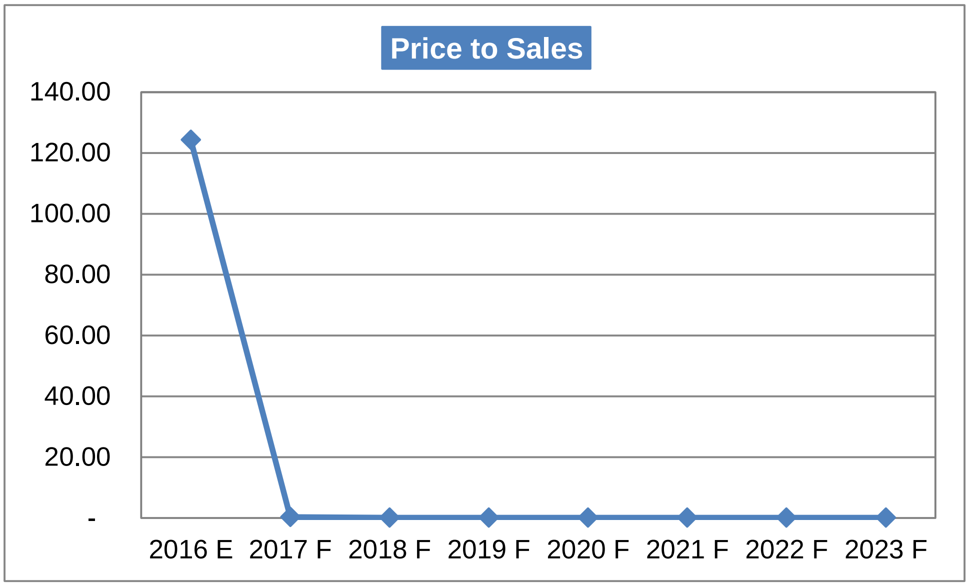

Assets per Share
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Cash per Share
Current Assets per Share
Total Assets per Share

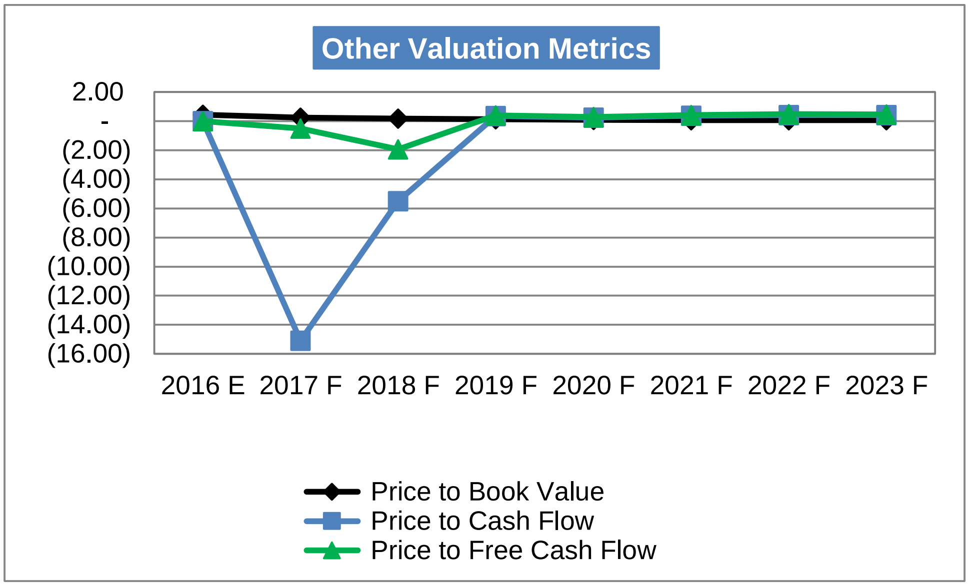

Sales per Share
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F

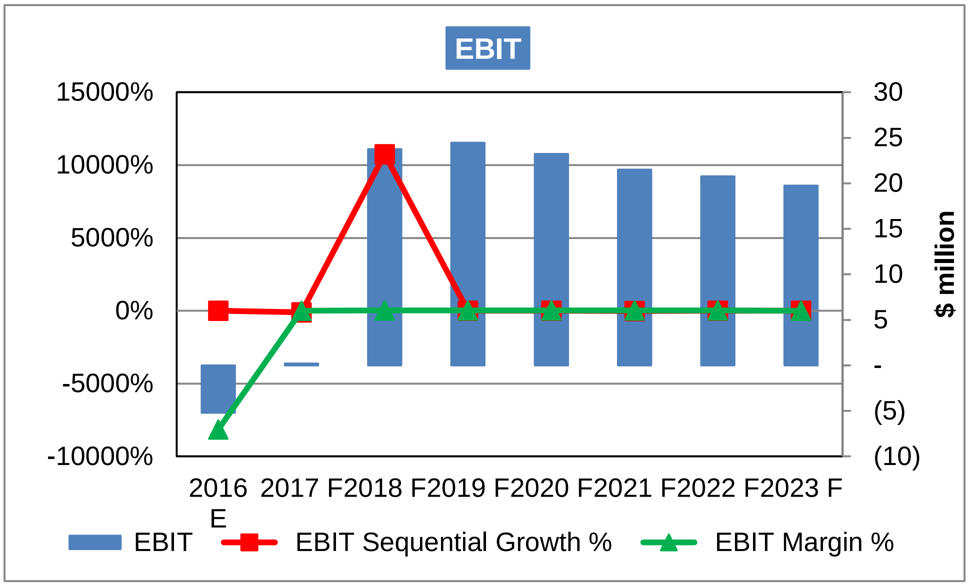

Liabilities and Equity per Share
0.25
0.20
0.15
0.10
0.05
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Tangible Book Value per Share
Long Term Debt - per Share

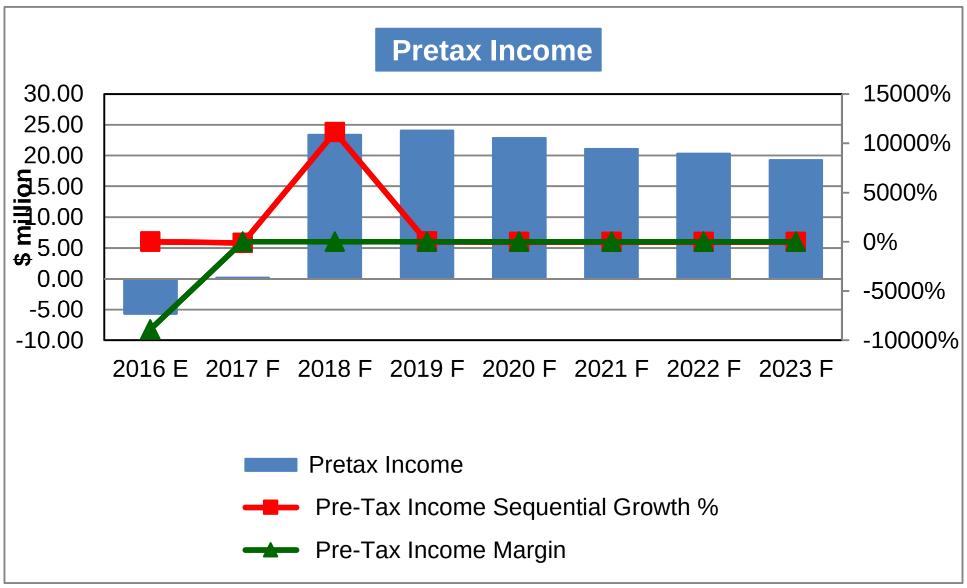

Additional Per Share Data
0.20
0.15
0.10
0.05
-
(0.05)
(0.10)
(0.15)
(0.20)
(0.25)
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Working Capital per Share
Free Cash Flow per Share

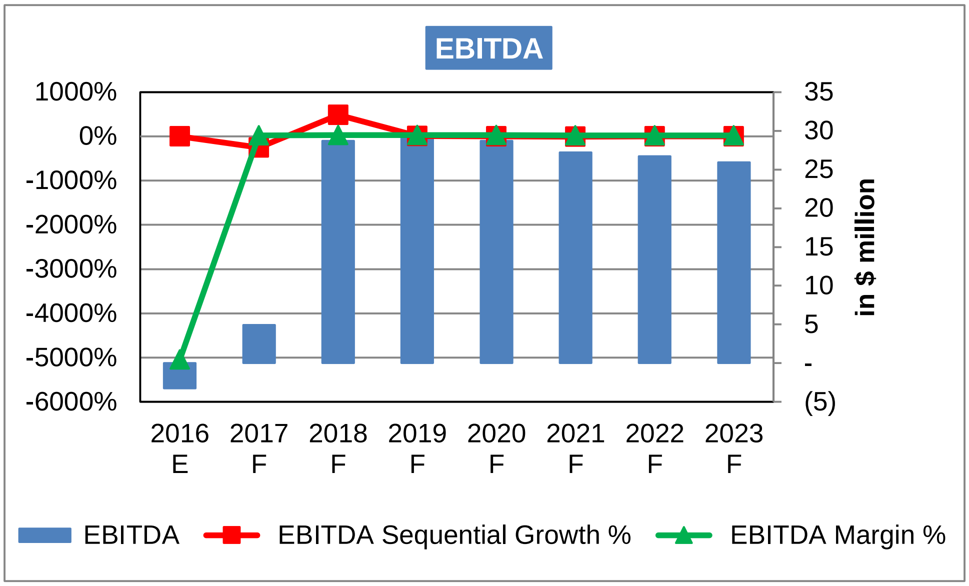

Price to Earnings
200.00
180.00
160.00
140.00
120.00
100.00
80.00
60.00
40.00
20.00
-
(20.00)
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F

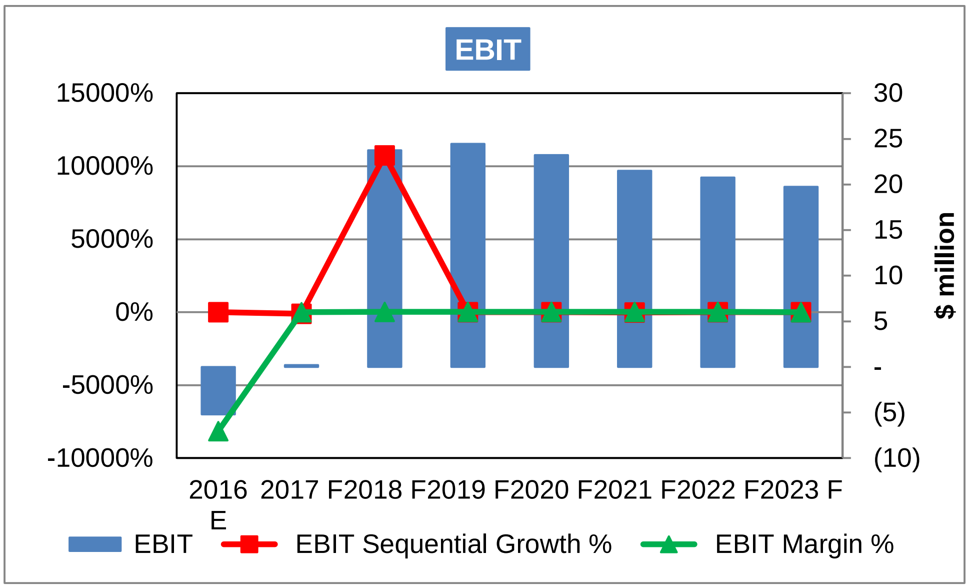

Price to Sales
140.00
120.00
100.00
80.00
60.00
40.00
20.00
-
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F

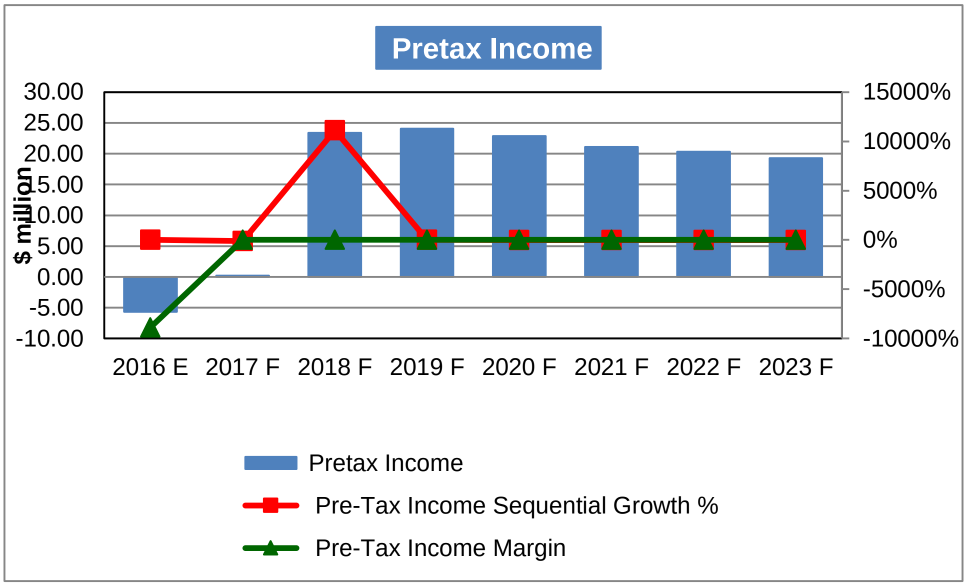

Other Valuation Metrics
2.00
-
(2.00)
(4.00)
(6.00)
(8.00)
(10.00)
(12.00)
(14.00)
(16.00)
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Price to Book Value
Price to Cash Flow
Price to Free Cash Flow

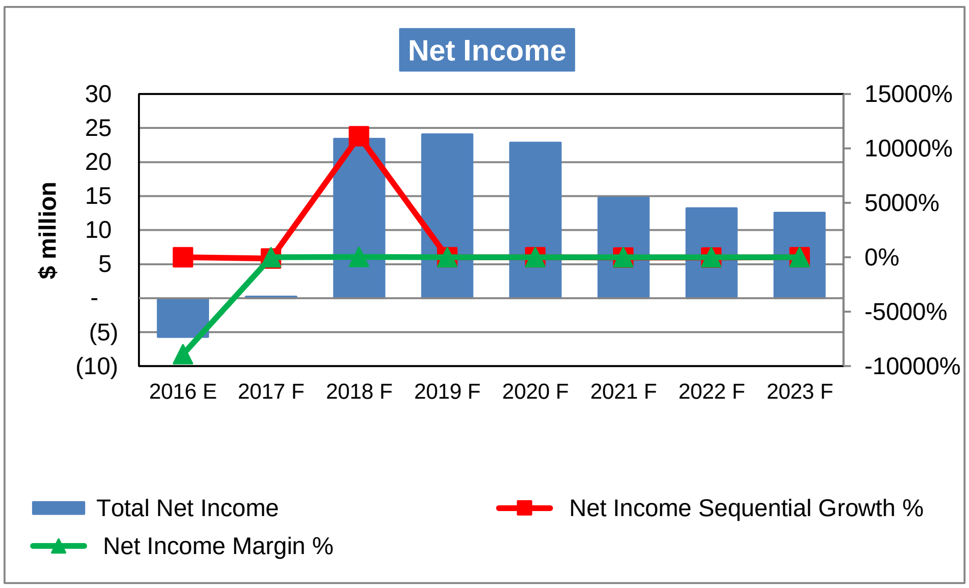

EBIT
15000%
10000%
5000%
0%
-5000%
-10000%
30
25
20
15
10
5
-
(5)
(10)
$ million
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
EBIT
EBIT Sequential Growth %
EBIT Margin %

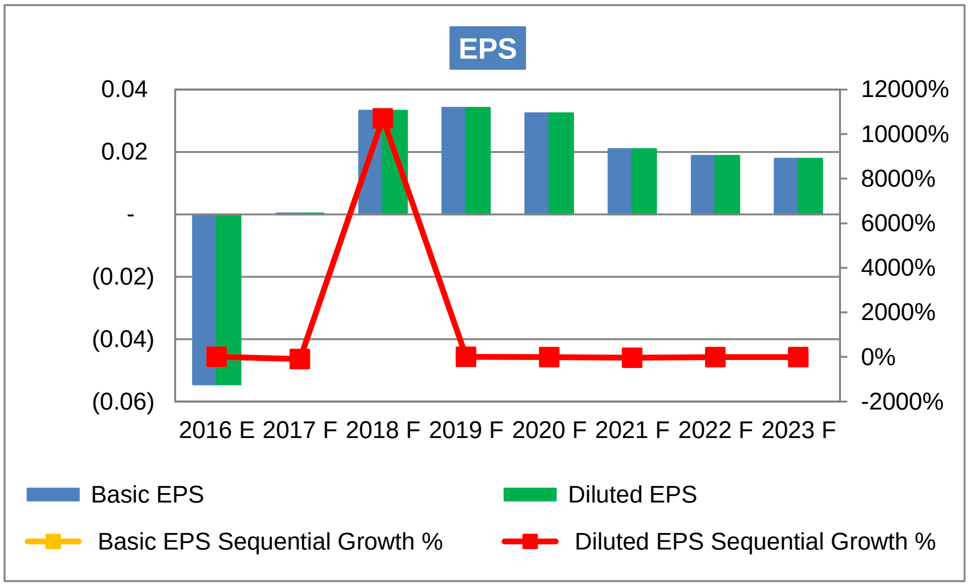

Pretax Income
30.00
25.00
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
$ million
15000%
10000%
5000%
0%
-5000%
-10000%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Pretax Income
Pre-Tax Income Sequential Growth %
Pre-Tax Income Margin

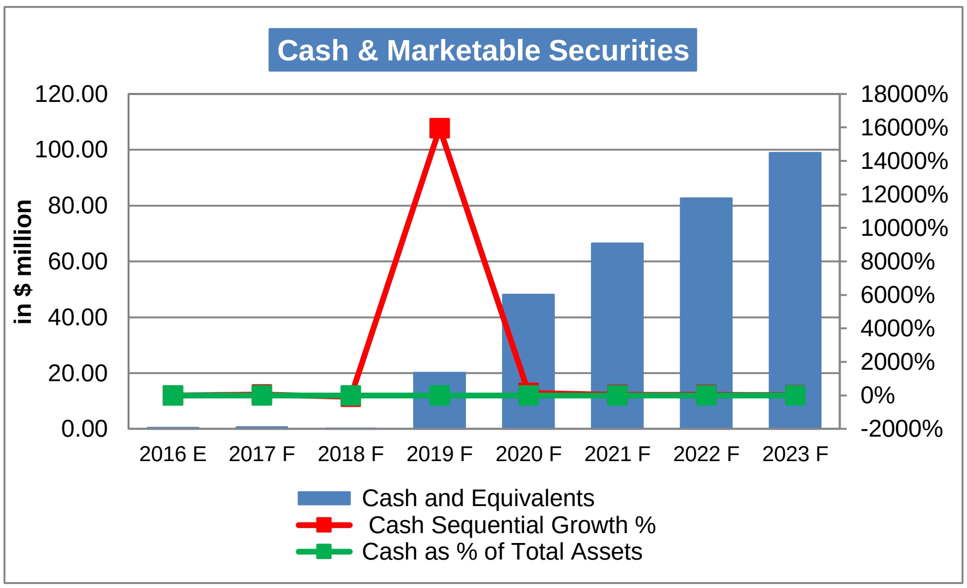

EBITDA
1000%
0%
-1000%
-2000%
-3000%
-4000%
-5000%
-6000%
35
30
25
20
15
10
5
-
(5)
in $ million
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
EBITDA
EBITDA Sequential Growth %
EBITDA Margin %

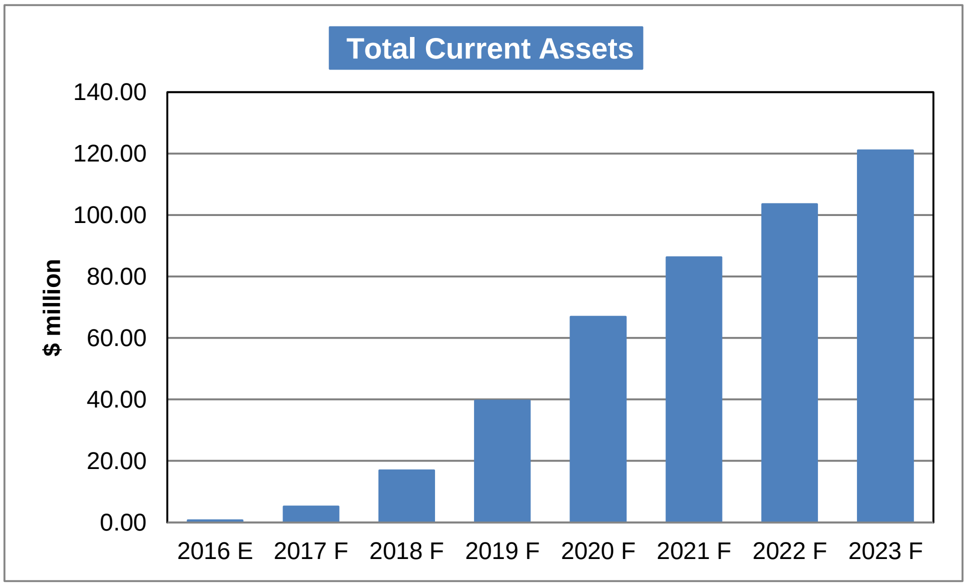

EBIT
15000%
10000%
5000%
0%
-5000%
-10000%
30
25
20
15
10
5
-
(5)
(10)
$ million
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
EBIT
EBIT Sequential Growth %
EBIT Margin %

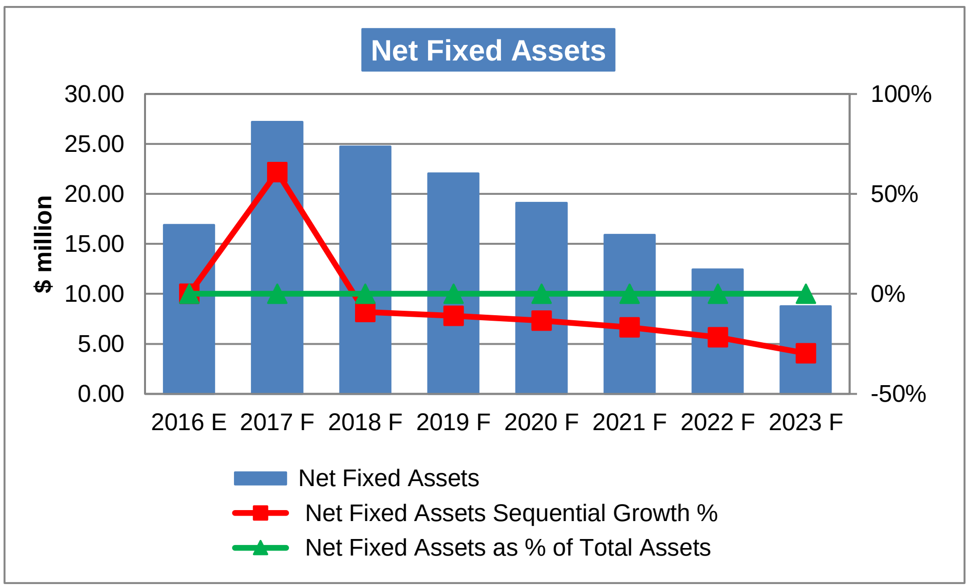

Pretax Income
$ million
30.00
25.00
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
15000%
10000%
5000%
0%
-5000%
-10000%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Pretax Income
Pre-Tax Income Sequential Growth %
Pre-Tax Income Margin

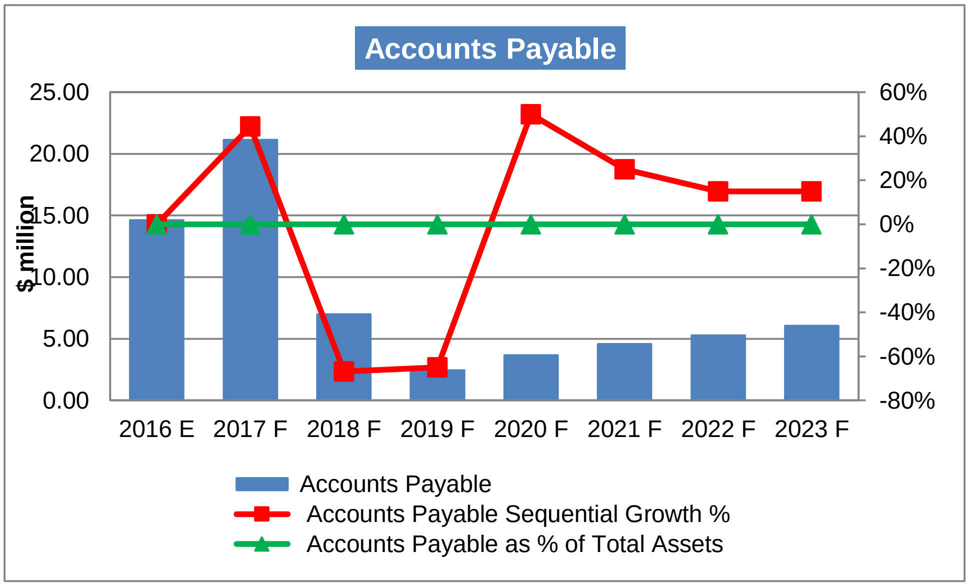

Net Income
$ million
30
25
20
15
10
5
-
(5)
(10)
15000%
10000%
5000%
0%
-5000%
-10000%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Total Net Income
Net Income Sequential Growth %
Net Income Margin %

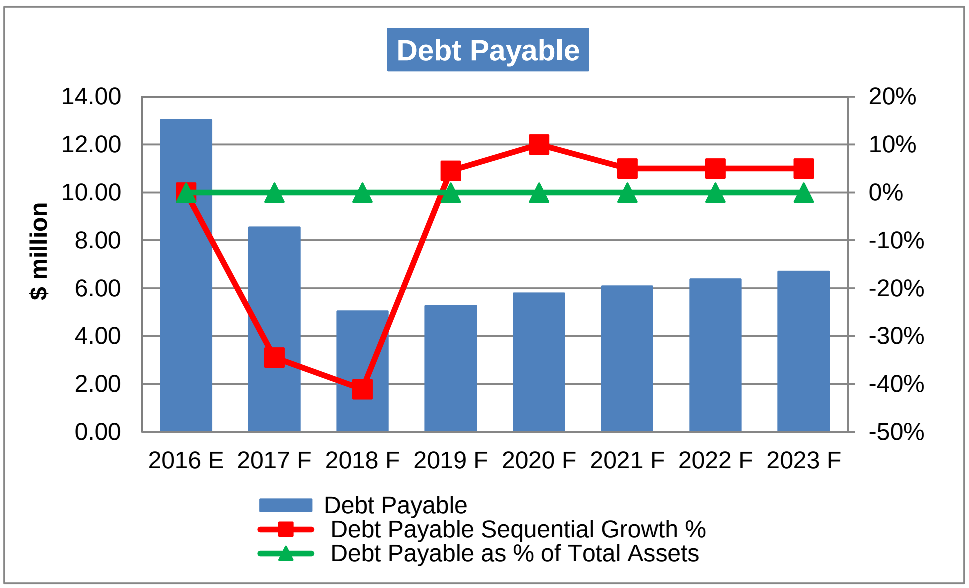

EPS
0.04
0.02
-
(0.02)
(0.04)
(0.06)
12000%
10000%
8000%
6000%
4000%
2000%
0%
-2000%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Basic EPS
Diluted EPS
Basic EPS Sequential Growth %
Diluted EPS Sequential Growth %

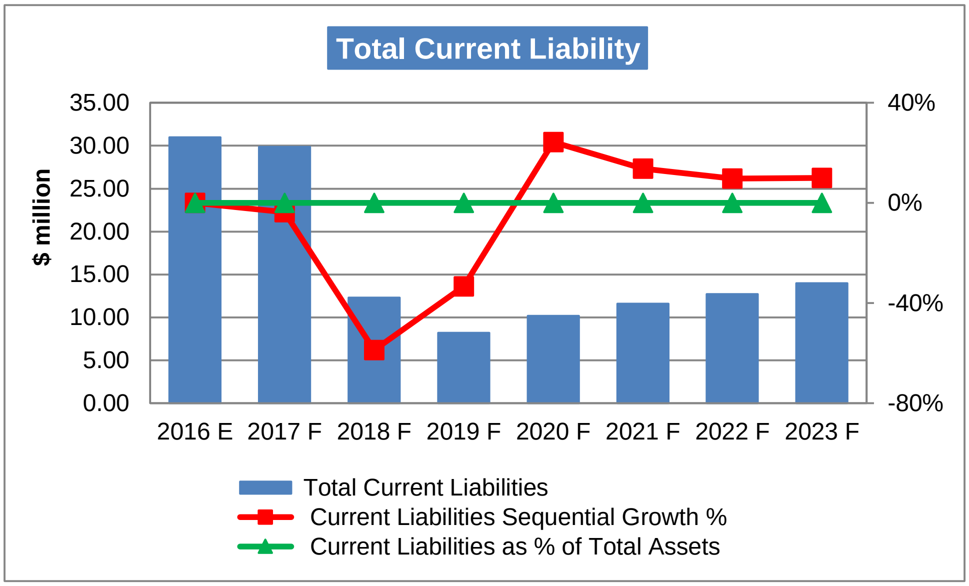

Cash & Marketable Securities
in $ million
120.00
100.00
80.00
60.00
40.00
20.00
0.00
18000%
16000%
14000%
12000%
10000%
8000%
6000%
4000%
2000%
0%
-2000%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Cash and Equivalents
Cash Sequential Growth %
Cash as % of Total Assets

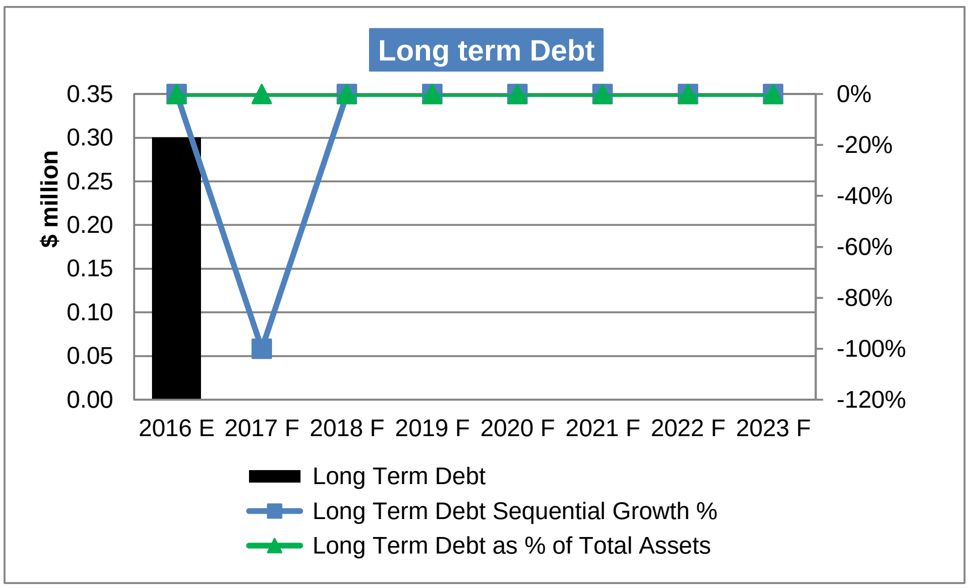

Total Current Assets
$ million
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F

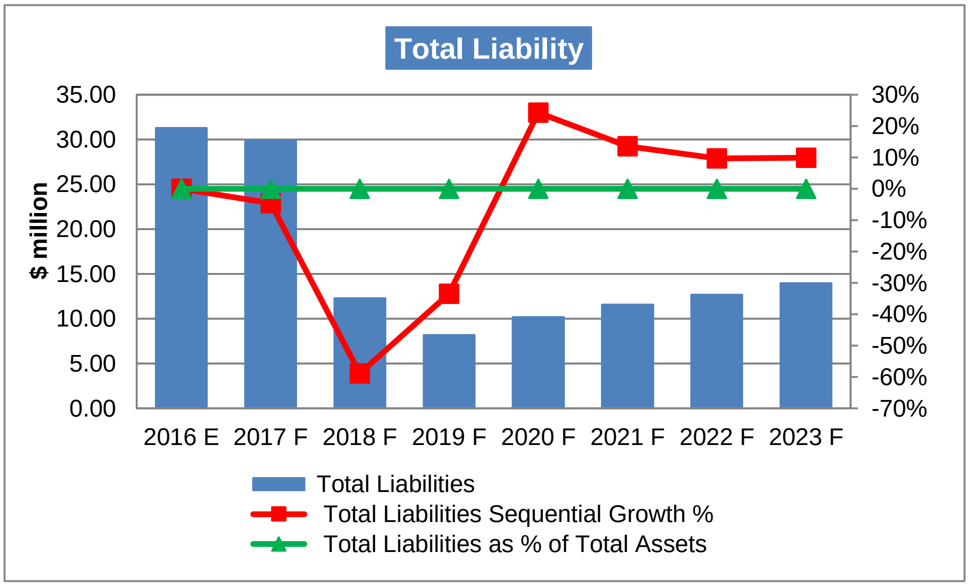

Net Fixed Assets
$ million
30.00
25.00
20.00
15.00
10.00
5.00
0.00
100%
50%
0%
-50%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Net Fixed Assets
Net Fixed Assets Sequential Growth %
Net Fixed Assets as % of Total Assets

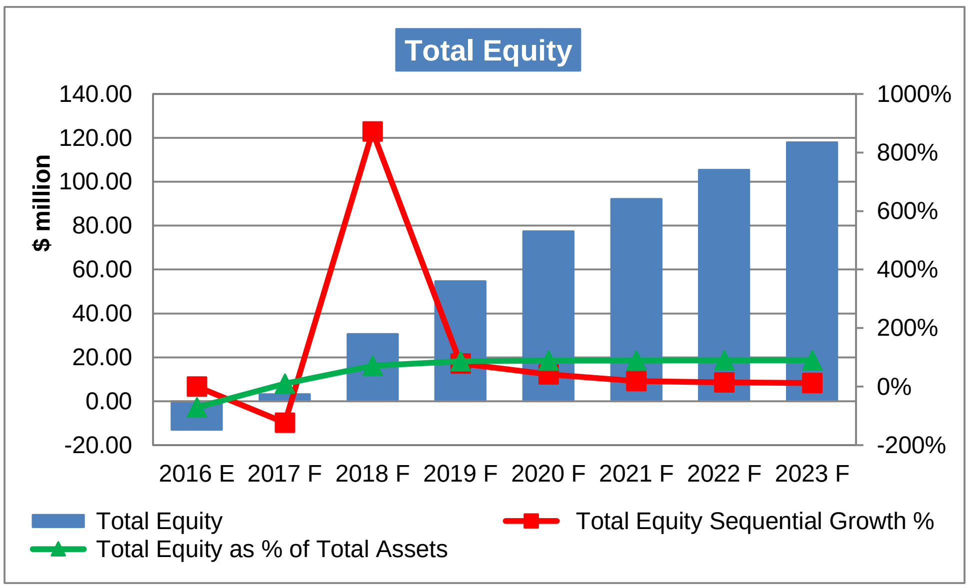

Accounts Payable
25.00
20.00
15.00
10.00
5.00
0.00
$ million
60%
40%
20%
0%
-20%
-40%
-60%
-80%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Accounts Payable
Accounts Payable Sequential Growth %
Accounts Payable as % of Total Assets

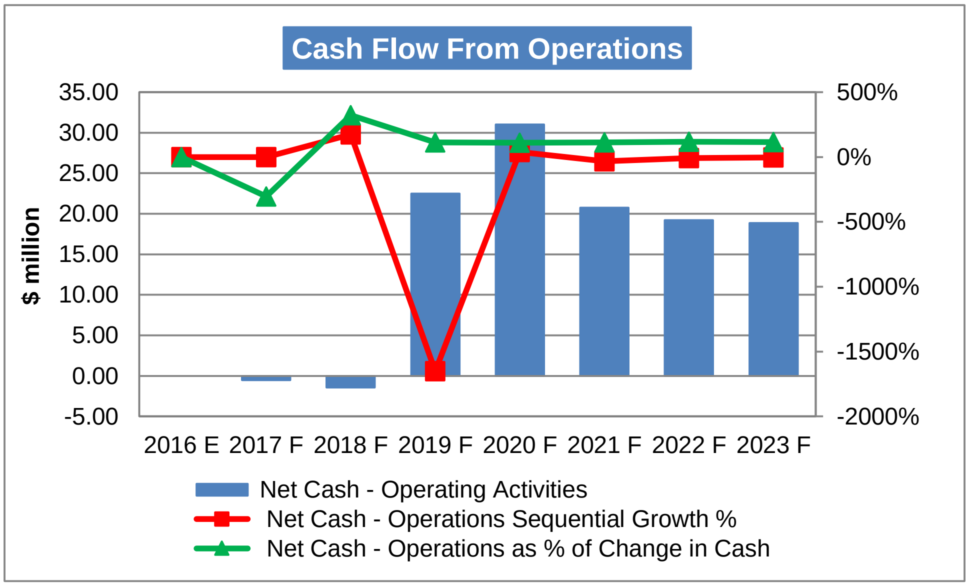

Debt Payable
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
$ million
20%
10%
0%
-10%
-20%
-30%
-40%
-50%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Debt Payable
Debt Payable Sequential Growth %
Debt Payable as % of Total Assets

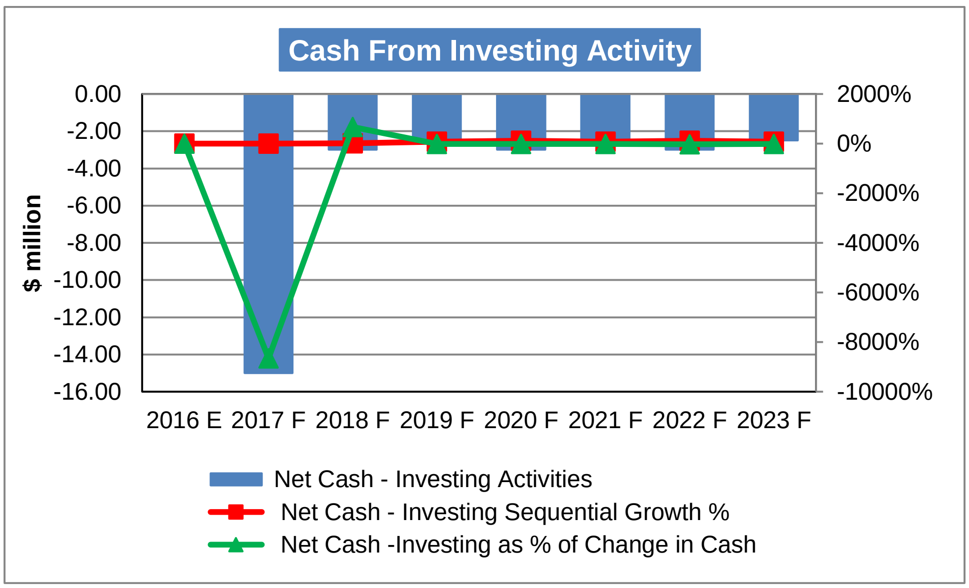

Total Current Liability
$ million
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
40%
0%
-40%
-80%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Total Current Liabilities
Current Liabilities Sequential Growth %
Current Liabilities as % of Total Assets

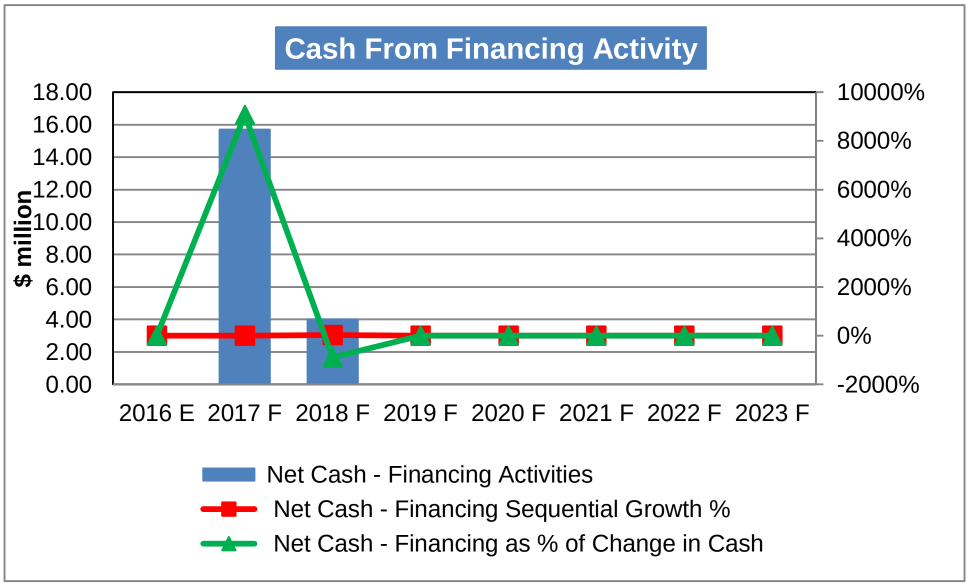

Long term Debt
$ million
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0%
-20%
-40%
-60%
-80%
-100%
-120%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Long Term Debt
Long Term Debt Sequential Growth %
Long Term Debt as % of Total Assets

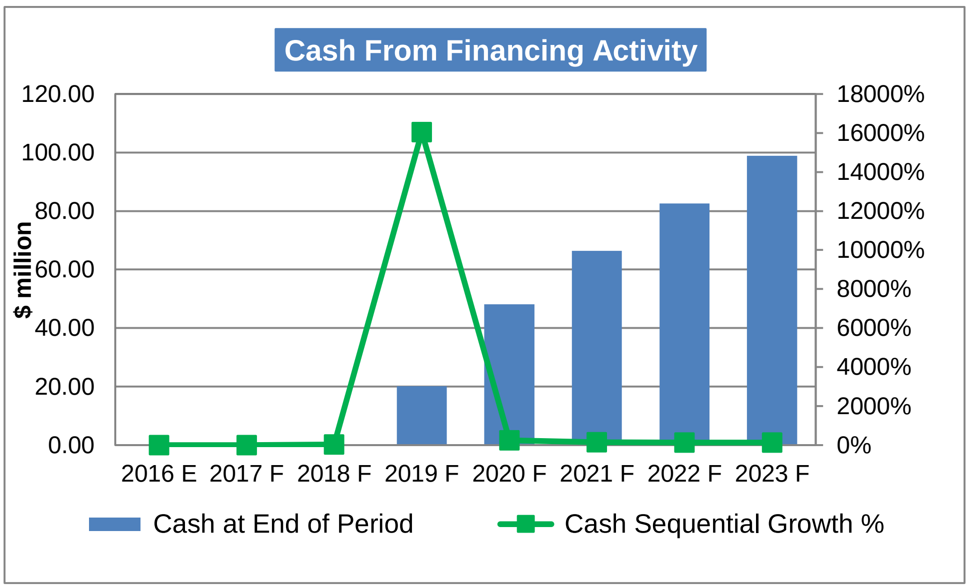

Total Liability
$ million
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
30%
20%
10%
0%
-10%
-20%
-30%
-40%
-50%
-60%
-70%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Total Liabilities
Total Liabilities Sequential Growth %
Total Liabilities as % of Total Assets


Total Equity
$ million
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
-20.00
1000%
800%
600%
400%
200%
0%
-200%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Total Equity
Total Equity Sequential Growth %
Total Equity as % of Total Assets


Cash Flow From Operations
$ million
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
-5.00
500%
0%
-500%
-1000%
-1500%
-2000%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Net Cash - Operating Activities
Net Cash - Operations Sequential Growth %
Net Cash - Operations as % of Change in Cash


Cash From Investing Activity
$ million
0.00
-2.00
-4.00
-6.00
-8.00
-10.00
-12.00
-14.00
-16.00
2000%
0%
-2000%
-4000%
-6000%
-8000%
-10000%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Net Cash - Investing Activities
Net Cash - Investing Sequential Growth %
Net Cash -Investing as % of Change in Cash


Cash From Financing Activity
$ million
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
10000%
8000%
6000%
4000%
2000%
0%
-2000%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Net Cash - Financing Activities
Net Cash - Financing Sequential Growth %
Net Cash - Financing as % of Change in Cash


Cash From Financing Activity
$ million
120.00
100.00
80.00
60.00
40.00
20.00
0.00
18000%
16000%
14000%
12000%
10000%
8000%
6000%
4000%
2000%
0%
2016 E
2017 F
2018 F
2019 F
2020 F
2021 F
2022 F
2023 F
Cash at End of Period
Cash Sequential Growth %

THE COHEN PRICE TARGET™

The Cohen Price Target™ is derived using a combination of academic and market-based valuation approaches. The following three equal weighted components used in calculating our target price, include the assumption of capital raised:

1. The first 33.3% equal weighted component: is the market multiple based valuation methodology. This method uses the industry average Price-to-Earnings ratio to calculate the potential stock price (and/or price to Book if an asset based Company). We take the average Price-to-Earnings multiple of a given industry. This means that, on an average, stocks in this industry should currently trade at a multiple times their future expected earnings. These earnings are usually only generated by a small Company raising cash to meet its master budget. The index, therefore, reflects capital invested in any micro/small cap Company.

2. The second 33.3% equal weighted component: Cohen Capital Employed based valuation. Most start-up and micro/small cap companies require significant capital to meet our projections. Our Cohen Price Target™ reflects the Company's ability to raise additional capital. Based on our capital projection and long-term price target from our Cohen DCF™ valuation model, we derive a Price-to-Capital Employed ratio. We then multiply this ratio with our capital employed per share assumption to derive this target price.

3. Our third equal weighted component is our Cohen Discounted Cash Flow (DCF) method of valuation. Our Cohen DCF™ valuation includes a complex trademarked formula proprietary to our firm, which includes an assumed long-term sustainable growth rate, cost of capital and assumed capital invested in a given Company. Our DCF price target values a Company today, based on projections of how much future cash will be generated from a given Company. We assume that a Company is worth all of the cash it can make available to investors in the future. It is called 'discounted' cash flow because cash in the future is worth less than cash today, and therefore must be discounted to today. We forecast various line items including assuming a given amount of capital is raised, to calculate the free cash flow we project a Company to generate during our 5 year forecasted time period. If a Company does not raise our estimated cash requirements, it is highly unlikely to reach our forecasts and can go out of business. After using a formula to discount free cash flow, we divide the total forecasted equity of the Company by the shares of stock outstanding to calculate our Cohen DCF™ valuation, or theoretical price per share target. We believe the Cohen DCF™ formula is a more accurate measurement of operating cash than the traditional DCF used by most Wall Street research analysts. A DCF, or 5 year forecasted free cash flow projection, cannot be calculated without forecasting the three statements (IS,BS,CF) for 5 years. We are the only firm in the investor awareness industry that forecasts all of our companies for 5 years in three assumed cases. We believe this in depth level of securities analysis is a must for all of our companies, and is a foundation of the Cohen Grassroots Research, Inc. Method™.

Capital raising and cash are the life blood of any micro-cap/small Company. Our Cohen Price Target™ includes three components, 33.33% equal weighted, that together reflect capital is raised in our client companies. Our components are trademarked and proprietary to our firm, as is the Cohen Performance Index™.

Most micro/small cap companies have difficulty raising sufficient funds to reach our theoretical forecasts; hence there is considerable risk for any investor. While we do not give investment advice, any Company that cannot raise adequate capital to finance its business model is a highly risky investment, short term or long term. Investment awareness campaigns also affect our price targets. Do not rely on our price targets because they are based on academic theory. Do your own research or consult with your investment professional.

Price Targets

Price targets can be heavily influenced by investor awareness campaigns. In general, we observe the more money spent on such campaigns, the greater the probability for short term price increases post report release. Our price targets assume capital raising and forecast 5 year Income Statement, Balance Sheet and Cash Flow statements. In a perfect world, these assumptions may be realized. We do not give investment advice. However, in the practical/real world, it is very difficult for a small Company to reach our theoretical 5 year projections. We are not aware of any research firm that forecasts the three statements (IS, BS, CF) in 3 cases for 5 years. We believe our price targets are unique to the body of knowledge in the field of securities analysis.

Note: How we calculate our Price Targets

We further explain our Cohen DCF, which is an important component of The Cohen Price Target. The Cohen Discounted Cash Flow Analysis (DCF) creates a price target and values a Company today, based on projections of how much future cash will be generated from a Company. Our DCF analysis assumes that a Company is worth all of the cash that it can make available to investors in the future. It is called "discounted" cash flow because cash in the future is worth less than cash today, and therefore must be discounted to today. We forecast various line items including assuming capital is raised, to calculate the free cash flow we expect a Company to generate during our 5 year forecasted time period. After using a formula to discount free cash flow, we divide the total forecasted equity of the Company by the shares of stock outstanding to calculate our Cohen DCF (Discounted Cash Flow) valuation, or theoretical price per share target. We believe our Cohen DCF is a more accurate method of calculating operating cash. We forecast three assumed price targets because companies change during 5 years, Base Case, Optimistic Case, and Pessimistic Case.

Note: What is our formula used to calculate our DCF, the Cohen Price Target?

Some line items include free cash flow to the firm, the weighted average cost of capital, assumption of capital raised and capital spent, and the total enterprise value of the business less its debt, total equity value, total shares outstanding, and our projected price per share. A DCF cannot be academically calculated without projecting the 5 year cash flow statement.

Risks of the Cohen Price Target

Our Price Targets assume capital will be raised in our four components, or 100% of the Cohen Price Target. The majority of micro-cap/small cap companies need capital to reach our 5 year sales and cash flow projections. In the academic world, The Gordon Growth Model justifies an analyst's decision to forecast for 5 years. We forecast the three statements for 5 years in 3 cases. However, in the practical/real world, buying a micro-cap stock based on 5 year forecasting is highly risky.

If smaller companies are able to raise capital, our theoretical price targets in a perfect world might be justified, providing the Company executes on its business model. If an investor believes that a given Company cannot raise the necessary capital to reach our projections, then any investment becomes highly risky.

The investor should consider all of the possibilities of any given Company being able to raise capital and execute over 5 years. Few micro to small cap companies are able to raise enough capital and execute over an extended period of time, primarily due to competition, management competence, access to capital and continued execution of their master plan, agenda and budget. Our price targets are academic theory and should not be relied upon. Investors should do their own research and consult with their financial consultants.

DISCOUNTED CASH FLOW (DCF) EXPLANATION

We forecast most of our companies through the 3 statements for 5 years, including assuming capital is raised for our client companies. Our outside contracted analysts use our Discounted Cash Flow Model (DCF) as academic justification to forecast the Income Statement, Balance Sheet and Cash Flow statements for 5 years. The following explains Discounted Cash Flow Analysis. Most micro-cap and small cap companies must raise sufficient capital to reach our forecasted valuations and price targets. The use of the word “we” means our outside contracted analysts explanation of their calculations for our DCF.

Discounted Cash Flow Analysis (DCF) values a company today, based on projections of how much cash will be generated from a company in the future. A DCF analysis assumes that a company is worth all of the cash that it can make available to investors in the future. It is called a "discounted" cash flow because cash in the future is worth less than cash today, and therefore must be discounted to today.

For example, suppose someone asked an investor to choose between receiving $100 today and receiving $100 in a year. Chances are the investor will take the money today, knowing that he can invest that $100 now and have more than $100 in a year's time. In simple terms, the amount that the investor would have in one year is worth $100 dollars today - or the discounted value is $100. We make the same calculation for all the cash expected to be generated by a company in the future to get a valid measure of the company's value today. As seen in the table below, the present Value of $100 reduces as the number of year’s forecasted increase.

Present value of $100

Amount ($)	Discount Rate (r)	Year (n)	PV (Amt/(1+r)^n
100	10%	1	90.91
100	10%	2	82.64
100	10%	3	75.13
100	10%	4	68.30
100	10%	5	62.09
100	10%	6	56.45
100	10%	7	51.32
100	10%	8	46.65
100	10%	9	42.41
100	10%	10	38.55

We use a Discounted Cash Flow Analysis (DCF) to forecast future cash flows to determine a fair value range for a given stock price.

We normally forecast cash flows during a five-year period from the Income Statement, which requires additional forecasting inputs. We focus on the Present Value of Future Cash Flows to compute a target price. The Cash Flow Statement is as an accounting statement that shows the amount of cash generated and used by a company in a given period, calculated by adding non-cash charges (such as depreciation) to net income after taxes. Cash flow can be attributed to a specific project, or to a business as a whole.

Free Cash Flow (FCF) represents the cash that a company is able to generate after spending the money required to maintain/expand its asset base. Free cash flow is important because it allows a company to pursue opportunities that enhance shareholder value. Without cash, it is difficult to develop new products, make acquisitions, pay dividends and reduce debt.

Free Cash Flows Computation

Net Cash From Operations	xx
Less/add: (increase)/decrease in working capital	xx
Less: Capital Expenditure	(xx)
Free Cash Flows	***xx***

The table below demonstrates how we calculate FCF for a company.

Free Cash Flow Calculation of XYZ Company

Figures in $'000 unless specified	**Y 0**	**Y+1**	**Y+2**	**Y+3**	**Y+4**	**Y+5**
Net Cash from Operations	2.07	20.37	55.42	129.01	241.43	397.98
CAPEX	(24.00)	(77.00)	(169.40)	(372.68)	(614.92)	(901.89)
Net Debt Additions	19.20	61.60	134.90	278.94	430.34	585.99
Free Cash Flows Equity	**(2.73)**	**4.97**	**20.93**	**35.28**	**56.84**	**82.08**

The theory behind the DCF model is that investors are willing to pay for a stream of future cash flows. Future cash flows are discounted with a present value formulation to determine a fair stock price today, given what we know and how we forecast the future. Present Value (PV) is the value in today's dollars assigned to an amount of money in the future, based on our estimate of rate-of-return over the long-term. In this analysis, rate-of-return is calculated based on annual compounding. A given amount of money is always more valuable sooner than later since this enables one to take advantage of investment opportunities. Because of this, present values are less than corresponding future values.

$$\text{Value of Firm} = \sum_{t=1}^{t=n} \frac{\text{CF to Firm}_t}{(1+\text{WACC})^t}$$

Our key input is the rate used to discount future cash flows to their present values. Most firms have a well-defined policy regarding their capital structure. Therefore, the Weighted Average Cost of Capital (WACC) (after tax) is appropriate for use with all projects. Present value is additive. The present value of a quantity of cash flows is the sum of each one's present value.

There are three main steps to calculating a DCF.

1. First, we calculate the stream of cash flows in the five-year forecast period. Then we discount these cash flows back to the beginning of the first forecasted fiscal year. The method we use to discount back to the present is the **Present Value Method** where we discount the free cash flows of the company by the **Weighted Average Cost of Capital**.

2. The second step is to determine the company's value at the end of the forecast period. This is the **Terminal Value**. The Terminal Value is then discounted back to the beginning of the first forecasted fiscal year. The method we use to discount back to the present is the Perpetuity Growth Model. The **Perpetuity Growth Model** accounts for the value of free cash flows that continues into perpetuity in the future, growing at an assumed constant rate. To determine the present value of the terminal value, one must discount the Terminal Value by a factor equal to the number of years included in the initial projection period. If N is the fifth and final year in this period, then the Terminal Value is divided by (1 + r) ^5.

3. The final step is adding these two to determine a fair value today based on what we know about the future.

An important decision in using Present Value models is deciding what cash flow or earnings stream will be forecasted and eventually discounted to compute an evaluation. We forecast Free Cash Flow which requires more input than simply using EBITDA (Earnings before Interest, Tax, Depreciation and Amortization).

A simpler method for discounting cash flow forecasts is using EBITDA (not a GAAP reporting required item). EBITDA can be defined as gross cash flow. This method of discounting is appropriate when EBITDA forms the basis of evaluation for the company. This method works well with small companies that have yet to post positive earnings. For all other companies, it is a good idea to examine at how the valuation methodology is applied.

DCF is a more involved forecasting method because it calculates the forecasted Free Cash Flow. The method requires forecasting of items such as the Operating Margins, tax rates, capital expenditures and changes in working capital. In addition, Debt is not subtracted from the discounted Free Cash Flow since Free Cash Flow is, by definition, net of the debt payments.

For the most part, free cash flow is a trustworthy measure that cuts through much of the arbitrary “guesstimates" involved in reported earnings. Regardless of whether a cash outlay is counted as an expense or turned into an asset on the balance sheet, free cash flow tracks the money left over for investors.

DCF analysis treats a company as a business rather than as a ticker symbol and a stock price. It requires us to think through all the factors that will affect the company's performance. DCF analysis really gives the investor an appreciation for what drives stock values.

Five years of forecasting in the Income Statement must be forecasted for the complete 5 year forecast timeframe. We analyze prior year’s data to aid in making better forecasts.

Terminal Value

Since we cannot estimate cash flows forever, we generally impose closure in discounted cash flow valuation by stopping our estimates of cash flows five years (Y+5) in the future and then computing a terminal value that reflects the value of the firm at that point.

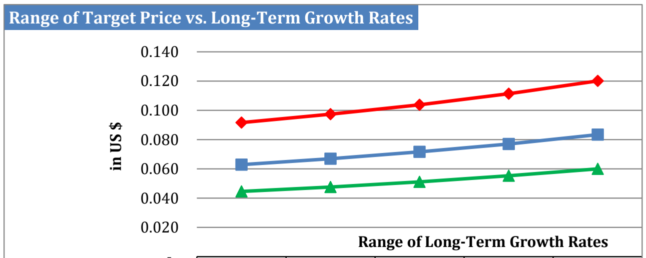
$$\text{Value of a Firm} = \sum_{t=1}^{t=n} \frac{CF_t}{(1+k_c)^t} + \frac{\text{Terminal Value}_n}{(1+k_c)^n}$$

The Terminal Value is the forecasted value of the stream of cash flows the company will have at the end of the forecast period. We base this on the company’s prospects at that time. We assume that the cash flow in year five (Y+5) will continue at a stable growth for five more years. Since this is too far in the future to accurately forecast, we do not attempt to forecast the individual line items that compute cash flow. We use the **Long Term Sustainable Growth Rate** as the primary determinant of the **Terminal Value**.

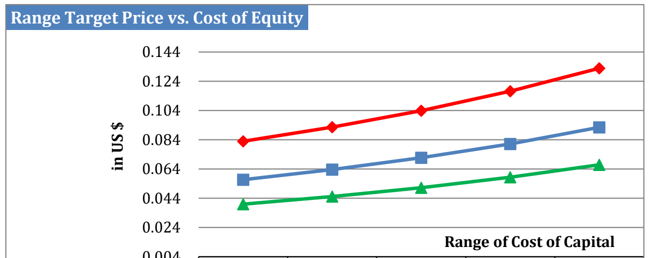
$$\text{Terminal Value}_t = \frac{\text{Cash Flow}_{t+1}}{r - g_{\text{stable}}}$$

Therefore, our DCF computes a value for the company in year five. We have found that calculating the terminal value using the stable growth method provides more accuracy because of the multiple or sum of years method we employ.

The Terminal Multiple is an important component of equity valuation. This is the value one expects will be the growth rate at the end of the forecast time period, Y+5. Since it is difficult to accurately forecast this, it is common to use the Long Term Growth Rate as the proxy for the Y+5 growth rate. As analysts, we can experiment with Terminal Multiples that are appropriate for the company in which we are analyzing. We normally forecast a long term growth rate in the middle of this range. Our output graphs then describe the range of target prices based on a range of assumed growth rates. When studying the target price output, one quickly sees the target price sensitivity to the terminal multiple. Our sensitivity index is defined as “A technique for determining the outcome of a decision if a key variable (discount rate) differs from projected one.” This makes empirical sense. When the perception of growth prospects changes for a company, the stock typically reacts strongly. These graphs objectively quantify such a strong potential reaction to the upside or downside. The following graphs and tables are samples from one of our research reports; aka commercial advertisements. Note that our analyst has to project the three statements for 5 years in order to calculate our DCF.



	1.0%	2.0%	3.0%	4.0%	5.0%
Optimistic Case	0.092	0.097	0.104	0.111	0.120
Base Case	0.063	0.067	0.072	0.077	0.083
Pessimistic Case	0.045	0.048	0.051	0.055	0.060



	18.8%	17.8%	16.8%	15.8%	14.8%
Optimistic Case	0.083	0.093	0.104	0.117	0.133
Base Case	0.057	0.064	0.072	0.081	0.092
Pessimistic Case	0.040	0.045	0.051	0.058	0.067

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The Penny Stock Market is a highly risky market targeted at short term traders.

Stock prices can be heavily influenced by investor awareness campaigns. In general, we observe the more money spent on such campaigns, the greater the possibility for short term price increases post our initiate coverage documents. We also observe that our target prices may not be met unless client companies have enough cash or are able to raise capital to meet our forecasts.

The Cohen Price Target includes four components. Most reports assume capital will be raised for the majority of our client companies. Most micro-cap/small cap companies need capital to reach our theoretical 5 year projections. The academic world justifies an analyst's decision to forecast the three statements (Income Statement, Balance Sheet and Cash Flow Statements) for 5 years. We normally do so in three cases: Optimistic Case, Base Case and Pessimistic Case. However, in the practical/real world, buying a micro-cap or small cap stock based on 5 year forecasting is highly risky. If smaller companies are able to raise capital, our theoretical price targets in a perfect world might be justified, providing the Company executes on its business model.

At times our price targets may be significantly higher than the current price of a stock. This can happen in theory only if the company's assets, with assumed capital raised, could theoretically create large sales and cash flow volumes over time, especially if the industry is a high growth industry. In the practical world, these price targets may appear to be unrealistic. However, we believe the academics of securities analysis of our calculations support the theory of these assumed price targets.

While we do not give investment advice, the investor should consider the possibilities of a given company being able to raise capital to execute its business model over 5 years. Few micro/small cap companies are able to raise enough capital and execute their master budget over an extended period of time. Our price targets are academic theory only and should not be relied upon. Investors should do their own research and consult with their financial consultants.