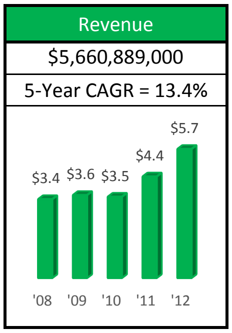
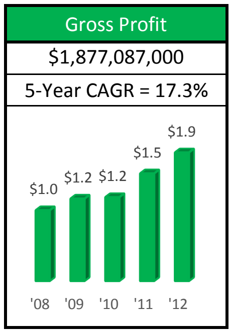
SELECTIVE
WEALTH MANAGEMENT

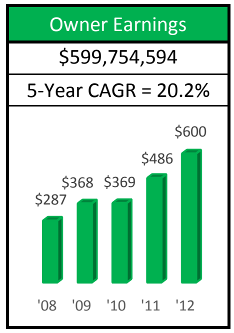
Joy Global Inc.
June 4, 2014

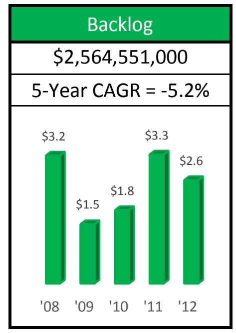
General Overview

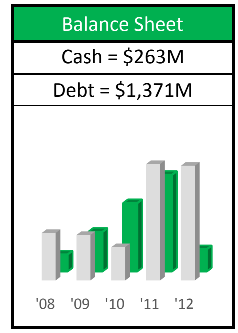
Joy Global Inc. (JOY) manufactures and services the world's largest mining equipment for the extraction of coal and other minerals. The company's products include Continuous Miners, Longwall Shearers, Powered Roof Supports, Armored Face Conveyors, Shuttle Cars, Electric Mining Shovels, Wheel Loaders, and more. The world consumed 26 million pounds of coal every 60 seconds in 2011 and JOY's massive mining equipment make production rates of this magnitude possible.











Purchase Logic

JOY manufacturers mining equipment for the extraction of coal and various other metals. Extracting coal from the ground is an extremely important part of the global economy. The majority of all electricity worldwide is generated from burning coal and it is extract from the ground at a rate of 26 million pounds per minute. JOY is the best in the world at manufacturing the massive equipment required for this monumental task.

JOY stands out from other heavy equipment manufacturers in some very big ways. First, they operate with a debt-to-equity ratio of 0.5:1. This compares to their biggest rival, Caterpillar, which operates with a debt-to-equity ratio of 2:1 – or nearly 4 times the debt of JOY. In addition to a conservative capital structure JOY has very high returns on equity of more than 25%. One disadvantage to JOY's industry is that it is cyclical. The mining of coal is directly tied to the health of the global economy and JOY's income typically fluctuates with the mining industry at large. In the last 10 years JOY has benefited greatly from the massive expansion of China's coal mining efforts. To help offset the cyclical nature of the industry JOY earns more than 50% of all revenue from aftermarket services – rather than new equipment sales. This revenue is recurring by nature and more stable than that derived from original equipment sales. Due to the lower debt-to-equity ratio and strong recurring revenue we purchased JOY at roughly 8 times earnings.

Key Metrics

The key metrics for JOY are Revenue, Gross Profit, Owner Earnings, and Bookings. The business factors that drive each of these metrics are described in detail below.

<u>Revenue</u>

JOY has two business segments that generate revenue and two business divisions within each segment. The two primary business segments are Underground Mining Machinery and Surface Mining Equipment. The Underground Mining Machinery includes all products that are required for mining material below the earth's surface. The Surface Mining Equipment includes all products that are required for mining material in open quarries. Within each of these business segments two divisions exist: New Product Sales and Aftermarket Activities. The new product sales includes all activities tied to the sale of original equipment. This particular division is highly cyclical and made up 48% of all revenue generated by JOY in 2012. The Aftermarket Activities includes all services to maintain equipment that is operating in the field. This includes repairs, new parts, training, and more. The aftermarket activities are recurring in nature and accounted for 52% of all revenue in 2012.

Gross Profit

Gross profits are calculated by subtracting the cost of goods sold from the sale price for each new product sold. Historically the gross profit margin has been between 29% and 33% of revenue. However, due to the cyclical nature of the business when revenue's rapidly decline gross profits follow suit. We believe that JOY has demonstrated some pricing power over the years as evidenced by the relatively stable gross margins.

Owner Earnings

The owner earnings for JOY represent the cash flows available to shareholders after all other expenses are paid. Due to the capital intensive nature of the business the net income reported from GAAP accounting is typically slightly higher than the actual owner earnings. We calculated the owner earnings over the last 10 years by adding back depreciation & amortization and subtracting the capital expenditures required to maintain the company's competitive position.

Backlog

Backlog represents unfilled customer orders for original equipment and aftermarket products and services. These customer orders include contracts to purchase original equipment or utilize services typically within the next 12 months. The backlog is a strong indication of general mining activity globally and has a strong correlation with revenues generated over the next 12 months.

Historical Performance of Key Metrics

Year	'08	'09	'10	'11	'12
Total Revenue	$3,418,934,000	$3,598,314,000	$3,524,334,000	$4,403,906,000	$5,660,889,000
Gross Profit	$990,005,000	$1,152,800,000	$1,173,626,000	$1,506,301,000	$1,877,087,000
Owner Earnings	$287,362,906	$367,722,666	$369,217,262	$486,187,564	$599,754,594
Backlog	$3,174,734,000	$1,470,878,000	$1,820,258,000	$3,253,334,000	$2,564,551,000
Cash	$201,575,000	$471,685,000	$815,581,000	$1,154,321,000	$263,873,000
Debt	$567,427,000	$543,681,000	$397,876,000	$1,392,307,000	$1,371,941,000

Revenue

In the last 5 years Revenue has compounded at a rate of 13.4%. The consistent revenue growth can be attributed to strong demand for coal in the People's Republic of China and the unusually low demand for new mining equipment during the great recession. During the 2008 and 2009 time period many companies deferred original equipment orders to cut costs, but eventually those machines needed replaced and the pent up demand has generated healthy growth for JOY in the last 5 years. We expect that JOY is likely heading into a cyclical downturn and revenue will decline in 2013, but we believe the price of the stock has declined beyond what is justified. In the last 10 years JOY has averaged $3.4 billion in annual revenue and we anticipate an average revenue at this level plus 3% growth per year. This would equate to an average revenue of $3.9 billion for the next 10 years. WE would expect broad swings in overall revenue with an anticipated range between $2.5 billion and $6.5 billion for the next 10 years.

Gross Profit

In the last 5 years the gross profit margin has been steady between 29% and 33%. During the next 10 years it is our expectation that the gross profit will move in tandem with revenues. We anticipate JOY to be able to maintain a similar margin profile as the last 10 years and would expect gross profits to fluctuate between $725 million and $2.1 billion.

Owner Earnings

Owner earnings have steadily increased as JOY has been able to leverage gross profits across the fixed expenses of the business. The 13.4% annual growth in revenue has translated in more than 20% growth for owner earnings. This operating leverage is a double-edged sword for JOY – in years when revenue and gross profits are low owner earnings will be severely depressed, whereas when times are good owner earnings will be unusually high. In the last 10 years the average owner earnings per year has been roughly $340 million. In the next 10 years we anticipate the same average owner earnings compounded at 3% per year. Due to some operating leverage we expect owner earnings to average $467 million and fluctuate between $0 and $750 million.

Backlog

The backlog has averaged $2.4 billion over the last 5 years. The highest backlog was achieved in 2011, which we believe was due to strong growth in China and 'catch up' purchases from delayed capital spending during the Great Recession. In the next 10 years we would anticipate a similar level for the average backlog with growth at 3%.

Summary of Key Metrics

Metric	Expectations
Revenue	Between $2.5 Billion and $6.5 Billion 10 Year Average of $3.9 Billion
Gross Profit	Between $725 Million and $2.1 Billion 10 Year Average of $1.3 Billion
Owner Earnings	Between $0 and $750 Million 10 Year Average of $467 Million
Backlog	$2.4 Billion Average with growth @ 3%

The Moat Around The Metrics

JOY benefits from an outstanding brand name and complex production processes. The machinery produced by JOY is extremely expensive and mining companies desire to purchase the highest quality equipment at the lowest price. Over the last 100 years JOY has cultivated a brand that is trusted in the market place and has become the go-to supplier of the world's largest equipment purchases. Customers typically select their equipment provider based on the lowest cost per ton mined and this is JOY's primary focus as an equipment manufacturer. In addition to having a respected and trusted brand name in the industry JOY also benefits from years of experience developing complex products. The equipment manufactured by JOY requires some of the largest heavy metal forgings in the world and very few companies are capable of producing such large equipment efficiently. The only major competitor for equipment as large as JOY's comes from Caterpillar and JOY has consistently outperformed CAT over the last 10 years. By focusing only on the largest and most complex mining equipment JOY has carved out a niche that earns excellent returns on capital and has limited competition.

Risks

JOY has more risk than our typical purchase. The company is subject to global economic trends and earns significantly less during recessions. In addition to being a cyclical business JOY also operates in the coal industry - a very controversial industry. As owners of JOY the primary risks we've assumed are outlined below.

Short-Term Risks

- Labor Disputes. The company currently has 30% of the US workforce and 16% of international employees under collective bargaining agreements. From time to time unions will strike demanding higher pay and limiting output. Labor disputes can have a substantial impact on revenues, gross profits, and owner earnings in the short-term. While this is a real risk the typical labor dispute is settled within a matter of weeks or months and business resumes as usual.
    - Moderate Risk
- Loss of Major Customer. While no single customer accounted for more than 5% of revenue in 2012 the top 10 customers make up 38% of total sales. The majority of customers are large multi-national mining companies with significant purchasing power. The strong purchasing power should theoretically put pressure on pricing, but JOY has been able to consistently markup new equipment and services between 29% and 33%. We believe the pricing power enjoyed by JOY will continue into the future due to the high quality equipment and powerful brand name.
    - Low Risk
- Acquisitions in China. JOY recently acquired International Mining Machinery (IMM). This company was headquartered in China where a large portion of JOY's business is conducted. Business in China, particularly in the mining industry, faces risk from fraud. We believe that JOY did an adequate amount of due diligence prior to the acquisition and IMM will prove to be a valuable subsidiary to JOY. There is a possibility that in the future JOY may acquire a business in China where the economics were not as favorable as originally presented and face a material setback from fraudulent practices.
    - Moderate Risk

Long-Term Risks

- Regulatory Changes. The largest risk we face as owners of JOY would be long-term changes in the regulatory environment surrounding carbon emissions. In the event that government bodies globally were to implement political changes that make the production of electricity using coal less economical it would have a material impact on the mining industry and in turn JOY. We believe this regulatory risk is high in the United States were JOY derives roughly 40% of its income, but significantly lower in developing nations. The majority of growth in mining is occurring in emerging markets where regulatory oversight is significantly less than developed nations.
    - High Risk
- Alternative Energy Sources. Coal currently is used to generate more than 41% of electricity globally. A major breakthrough in alternative energy sources, such as economically competitive renewables, would reduce the demand for coal. We view this risk as very low. The majority of plants being built today will be in operation for at least 30 years and they utilize coal as the primary fuel. Utilities will use these plants until end of life and the amount of coal required to power the world for the next 30 years – even in light of several major renewable break trough's – will be exceedingly large. JOY should be able to earn substantial profits for the next 30 years despite the strong prospects of renewal energy.
    - Low Risk

Conclusion

Joy Global Inc. (JOY) manufactures and services the world's largest mining equipment for the extraction of coal and other minerals. In 2011 the world consumed 26 million pounds of coal every 60 seconds and JOY's massive mining equipment make production rates of this magnitude possible. JOY stands out from other heavy equipment manufacturers in that the company's debt level is roughly 1/4th the average competitor. In addition to low levels of debt JOY has been able to post outstanding returns on equity – in excess of 25%. The superior profitability is driven by a strong brand name and expertise over complex production processes. As owners of JOY we have assumed more risk than our typical purchase. The company operates in a highly cyclical industry that is heavily regulated in the developed world. Despite the risks and challenges associated with coal we believe JOY is the global leader in a niche market – ultra heavy machinery – and will continue to thrive as the global leader for decades into the future. We purchased JOY at approximately 8x earnings.

Works Cited

1) *JOY Annual Report - SEC Filing 10-K.* EDGAR, 2012.

Disclaimer

No part of this document is to be reproduced without our written permission. This document has been prepared and issued by Selective Wealth Management ("SWM") on the basis of publicly available information, internally developed data and other sources believed to be reliable. The information contained herein is not guaranteed, does not claim to be comprehensive and is strictly for informational purposes only. SWM does not assume any liability for any direct, indirect or consequential loss that may result from the reliance by any person upon any such information or opinions. Any expressions of opinions are subject to change without notice. This document does not constitute an offer or an invitation to trade or invest. No party should treat any of the contents herein as advice. Investing contains risks.