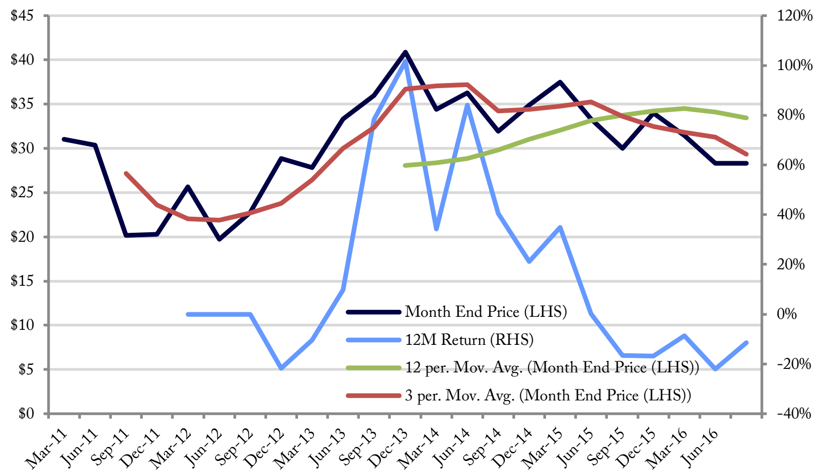
August 12, 2016

Ann Marie Ott

General Motors Co (GM)

Summary

Industry	Auto Manufacturer (Major)
Last Price (8/11/16)	$31.75
52-Week High	$36.88
52-Week Low	$24.62
Market Cap (Bil)	49.24
Beta	1.65



Recommendations

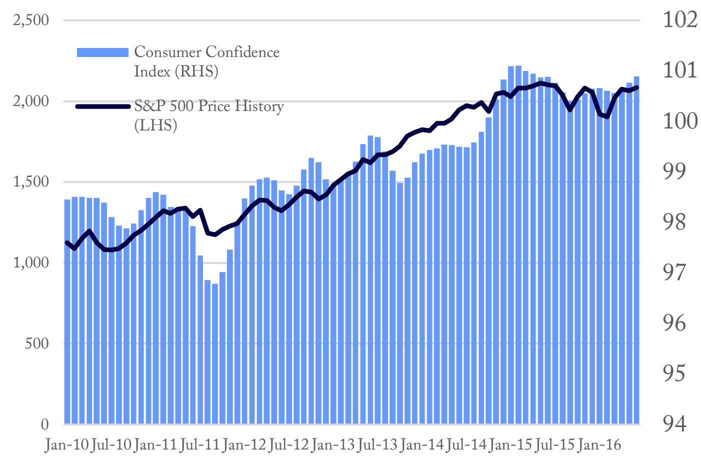
Current Action	**BUY**
Purchase Price	**$30**
Sale Price	**$45**

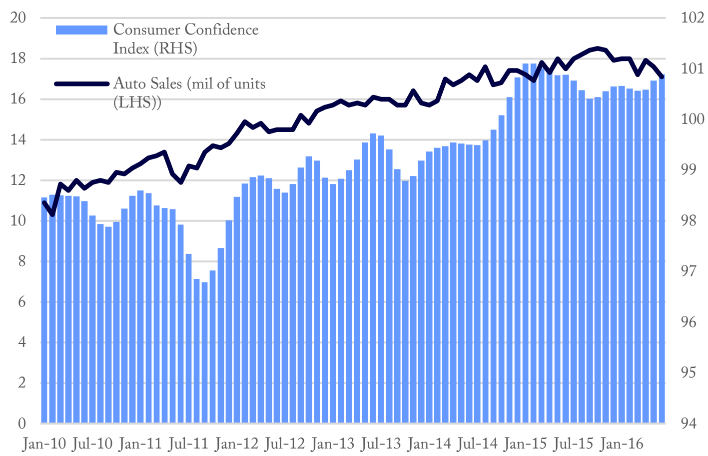
Company Description

General Motors designs, builds, and sells a variety of automobiles ranging from cars to crossovers and trucks. The company operates through GM North America, GM Europe, GM International Operations and GM South America. Its brand names include Buick, Cadillac, Chevrolet, GMC, Opel, Holden, Vauxhall, Baojun, Jiefang, and Wuling. Apart from consumer retail sales, GM also sells vehicles to daily rental car companies, commercial fleet customers, leasing companies, and governments. General Motors was founded in 1897 and is based in Detroit, Michigan.

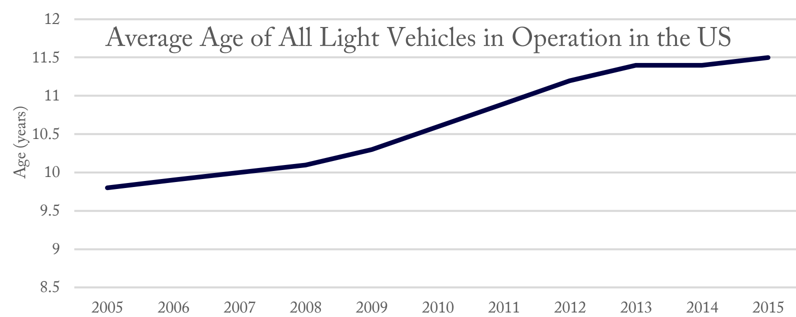
Industry and Competitors

Consumer Goods – Auto Manufacturer (Major) The auto manufacturer industry is comprised of companies that design, build and sell automobiles. Apart from the sale of vehicles, the auto industry takes on much larger roles by providing over 7 million jobs to the American people and being a top material consumer in industries such as rubber, steel, recycled products, and even agricultural products. The success of the auto industry is also an indicator of economic well-being. Using the consumer confidence index (CCI), which measures households' overall economic situation and plans for major purchases, in conjunction with the S&P 500 price history (charted below), one can see how the rises and falls of the market bring about higher or lower consumer confidence. Over the past six months, as the S&P 500 has continued to grow, consumers have become more confident and more likely to make major purchases. This is also seen in the second graph below, which charts the CCI and auto sales. The general trends are that as the CCI increases, so do car sales and vice versa. The nature of this trend is explained by the "non-staple" standing of a vehicle. Generally, new cars are not considered a household necessity, so during economic downturns, people tend to buy fewer new cars. However, when the economy flourishes, consumers become more confident and are willing to spend money on major purchases, such as new vehicles.

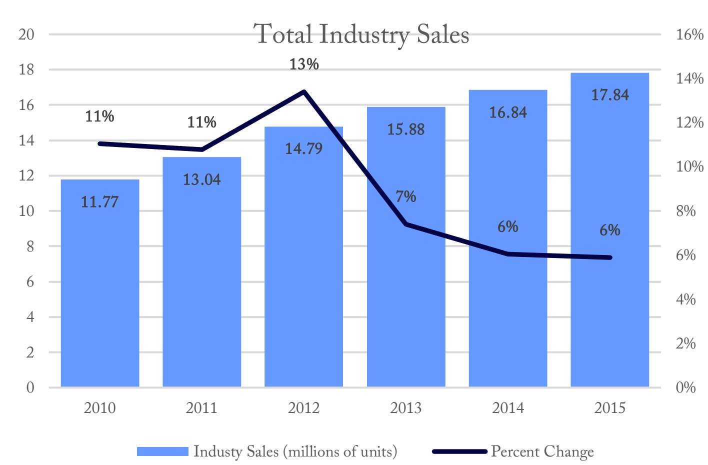


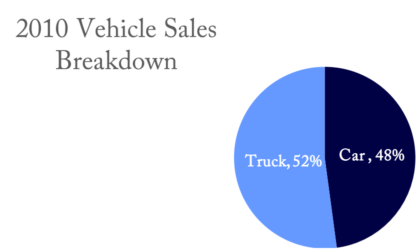


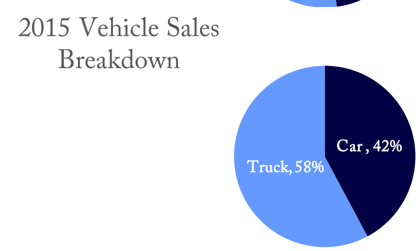
Turning to the average age of vehicles on the road (charted below), vehicle age has been steadily increasing since 2005. There are two ways to interpret this trend in relation to new vehicle sales. One is that vehicles are manufactured to a higher standard. If so, it might be that this increasing trend will continue – meaning, the current trends for new car sales will continue as has been the case recently. A second interpretation is that cars may be nearing a threshold age where people will feel the need to buy a new car, and thus there could be an increase in new car sales. While either of the two theories may be likely, given the current CCI discussed above, the growing markets, and even items such as low unemployment, low interest rates and low gas prices, consumers with older cars may see the current market as offering the perfect opportunity to purchase a new vehicle.



In more recent years, which have seen a steady increase in auto sales (below), there has also been a major industry shift from cars to trucks. While total industry sales have been increasing, car sales dipped 2% from 2014 to 2015, while truck sales have been increasing rapidly since 2010 and saw recent growth of 13% from 2014 to 2015. Illustrated by the pie charts, truck sales held about 52% of the market in 2010 compared to car sales, but in 2015 truck sales increased to 58% of the market.







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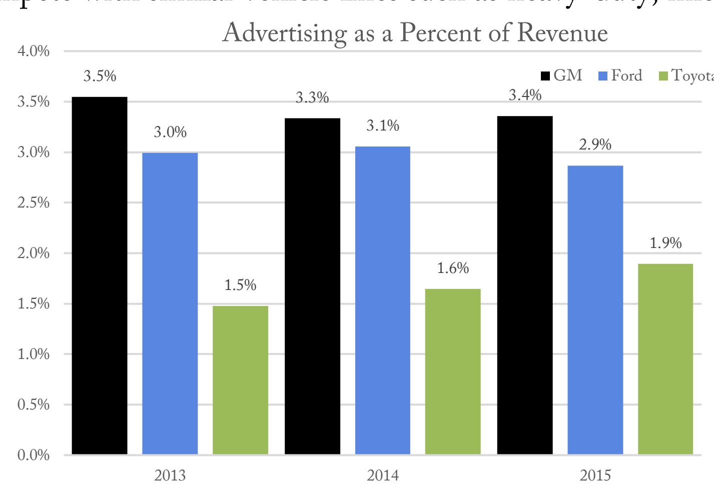
Looking to the future, the auto industry is on track for a drastic change as the hybrid car has now morphed to the idea of a completely electric car. Not all manufactures have started producing electric cars but some brands, such as Tesla, have made their name with new electric vehicle lines. This change will require large amounts of R&D spending, however, at the moment, the popularity of these technologically advanced vehicles is hindered by the questions surrounding battery disposal and the lack of charging stations when compared to the extensive network of gas stations. Additionally, some people still tend to buy cars for performance and the thrill of driving, and currently, these vehicles do not offer these characteristics.

Moving to competitors, GM's main competitors include Ford, Toyota, Honda, Tata Motors, Kandi Technologies and Blue Bird Corporation. Industry and competitor statistics are below:

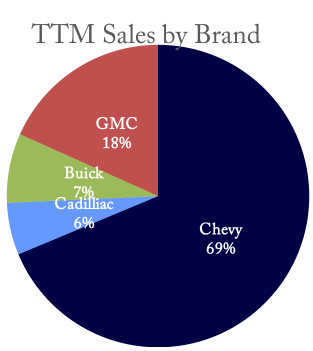
	Industry	GM	F	TM	HMC	TTM	KNDI	BLBD
Market Cap	1.76B	48.24B	48.49B	176.96B	52.66B	26.56B	367.78M	311.12M
Price/Earnings	13.0	3.95	5.76	8.48	16.18	16	42.14	31.88
Price/Estimated Earnings		5.30	6.49	10.68	10.15	8.5	N/A	11.07
Price/Sales		0.30	0.31	0.64	0.37	0.64	1.68	0.33
Price/Book	1.6	1.13	1.55	1.11	0.82	2.19	1.39	N/A
PEG Ratio		0.51	0.73	0.32	0.62	0.36	0	0.95
Dividend Yield	3.4%	4.94%	4.97%	3.24%	3.02%	0.04%	N/A	N/A
Net Profit Margin	5.0%	7.87%	5.78%	7.92%	2.32%	4.00%	4.15%	2.88%

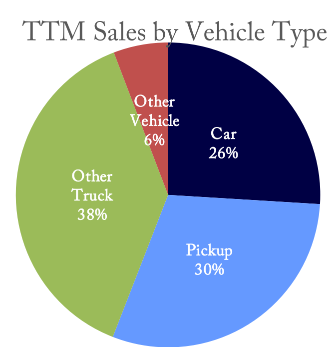
As the industry moves towards trucks and SUVs, GM's network of competitors begins to shrink in size. Toyota and Ford offer GM its heaviest competition as they compete with similar vehicle lines such as heavy-duty, mid-sized, and full-sized pickups along with the popular SUVs and crossover. As all three manufacturers shift toward SUVs and pickups, sales depend on consumer preference, brand loyalty, advertising and reliability. Considering advertising, the chart to the right shows advertising costs as a percent of revenue. In the past three years, GM has consistently spent more on advertising than both Ford and Toyota. As GM tends to be in direct competition with Ford, this excess amount of advertising allows GM to showcase their vehicle reliability over Ford as well as build brand recognition by consumers.



Significant Products

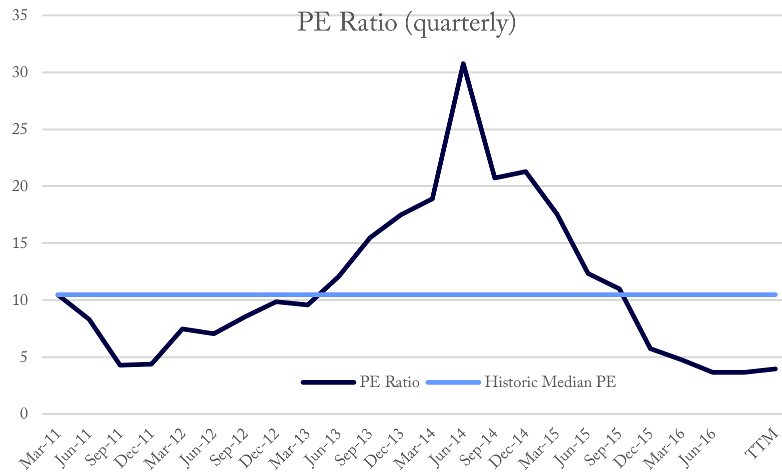
GM's most popular and significant products come from their Chevy, GMC, Buick and Cadillac lines with Chevy dominating sales. As a whole, GM sales are currently (using TTM data) led by their truck sales with 30% of sales devoted solely to pickup trucks and 38% devoted to other trucks such as SUVs. To the right are two pie charts showcasing these different breakdowns of sales.

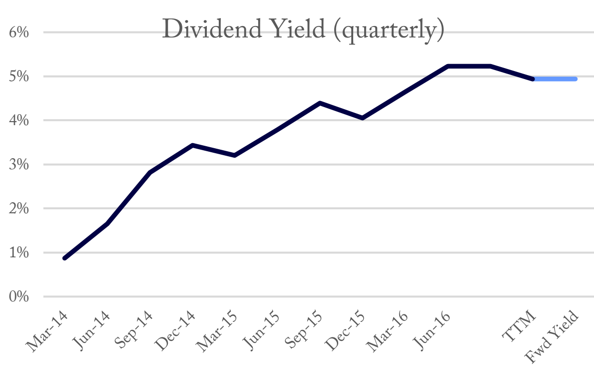


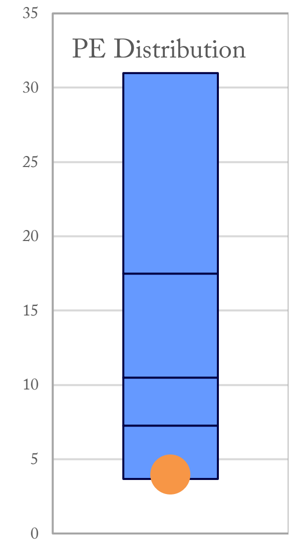


VALUATION

Relative to history, valuations tend to be below long-term averages. The chart to the right shows the PE ratio and its fluctuations over time. Data is selected starting in December of 2010 so as to avoid the large fluctuations around the 2008 recession. In this time period, PE has seen a high of 31.0 and a low of 3.7 with stability around a long-term median of 10.5. Currently, PE has a value of 4.0, which is in its 2nd percentile using quarterly data. Similarly, P/B, P/S, P/Operating cash flow, and EV/EBITDA are trading well below historic medians in their lowest, 36th,19th and 35th percentiles historically. Price to free cash flow is its 77nd percentile perhaps indicating that GM is not generating as much cash as it has historically. Dividend yield is currently at a record high of 4.94% with a forward dividend yield of 4.94% implying a continuation of high yield in the future. This makes GM an attractive investment to income seeking investors. Additionally, as is charted to the left, dividend payments have been growing steadily since 2014.

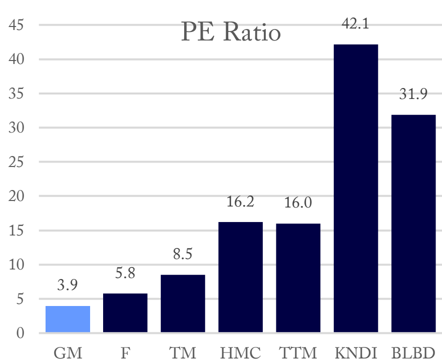


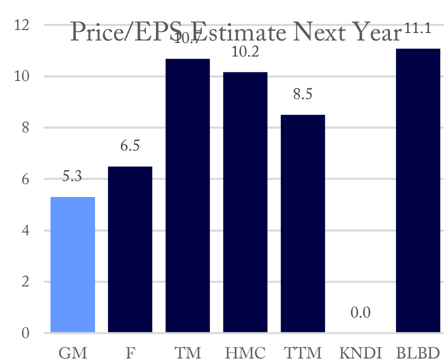


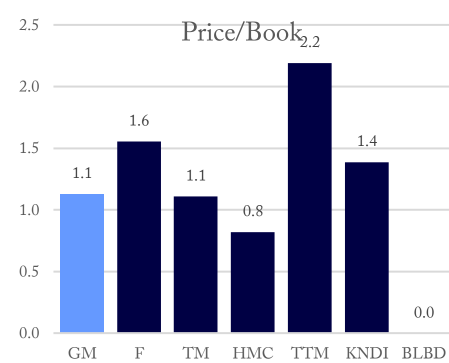


Turning to the analysts, the forward PE of 5.22 implies -24% growth from its current PE and perhaps lower earnings. This may reflect analysts fear of slower economic growth, higher interest rates and/or increased competition from hybrids. However, this PE increase in conjunction with growth expectations illustrates that this higher PE value for the future is not solely due to a drop in earnings. The analysts' PEG ratio of 0.51, which indicates 5-year growth relative to expected PE, suggests an undervaluation as 5-year growth surpasses expected PE and therefore, a higher PE is justified given growth expectations relative to price.

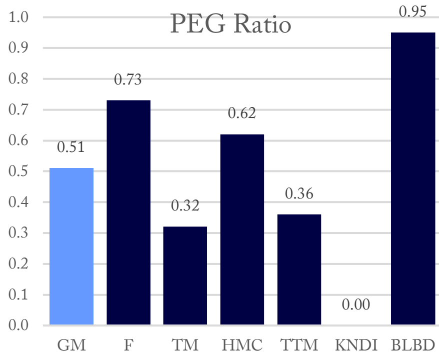
Comparing GM to its nearest competitors, valuation numbers look quite good for GM as they see a lower PE relative to competitors indicating higher earnings relative to price. General Motors also sees very attractive P/S,

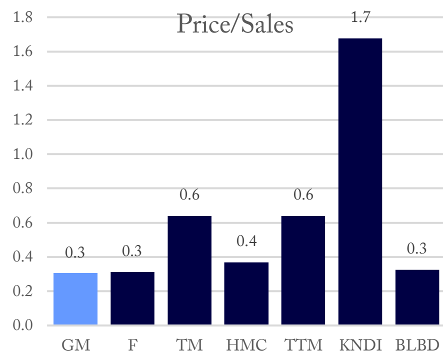


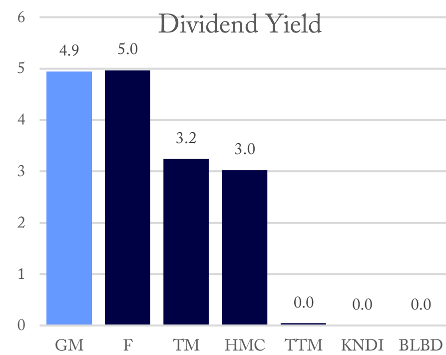




PEG and P/B ratios. Additionally, GM offers one of the highest dividend yield of all its competitors. Charts of these statistics are above and below.

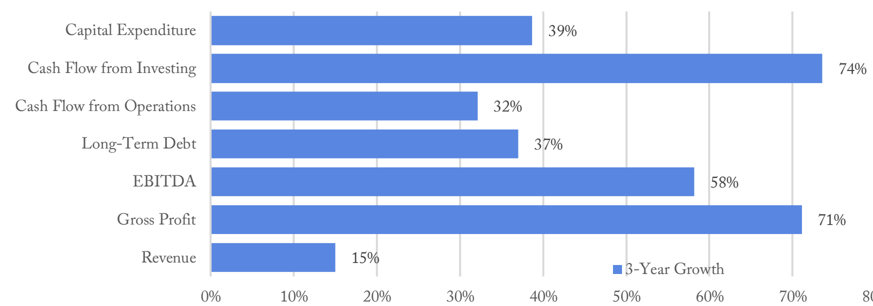




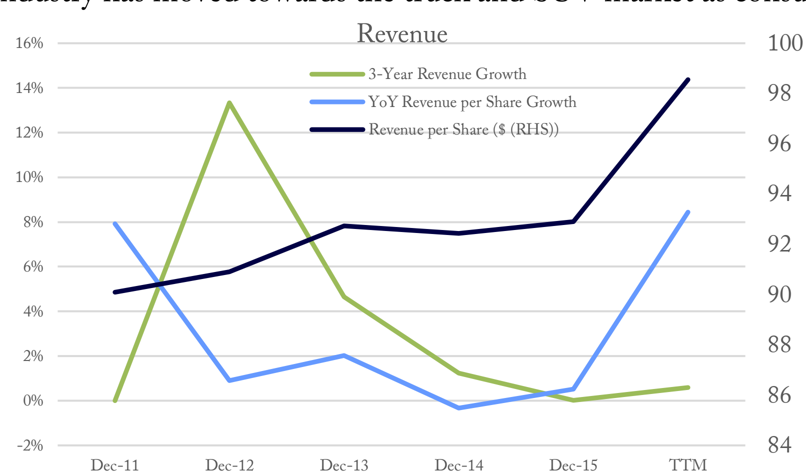


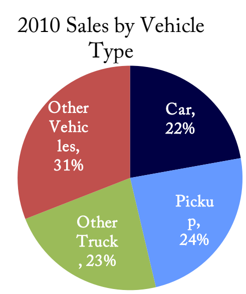
Growth

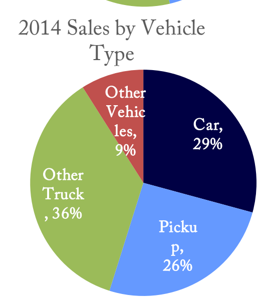
Growth numbers for GM are a bit all over the place with some numbers like gross profit, EBITDA, cash flow from investing and operating income and cash flow from financing (both not shown to right are at 3-year record highs) seeing high percentiles historically in the 3-year window, while items such as revenue, long-term debt, cash flow from operations, and capital expenditure have growth rates below their long-term medians. Data for these growth numbers are selected starting in 2010 to avoid the large fluctuations associated with the 2008 recession, and therefore, only 3-year growth numbers are relevant since there is not enough 5-year data due to the small window.

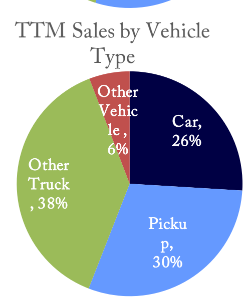


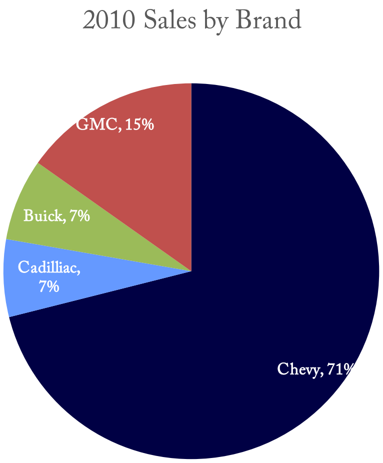
Revenue per share has been increasing since 2011 with a positive 3-year growth rate over these few years. While not seeing tremendous growth, GM has constantly been able to increase revenue since 2011. GM has been able to do this by adapting to the preferences of consumers. As was mentioned in the Industry and Competitors section, the auto industry has moved towards the truck and SUV market as consumers value the work and family use that pickup trucks and SUVs offer. In the pie charts to right, GM has moved from a fairly even distribution of vehicle sales in 2010 to truck dependent sales seen in the TTM values so as to offer products in line with consumer desires.

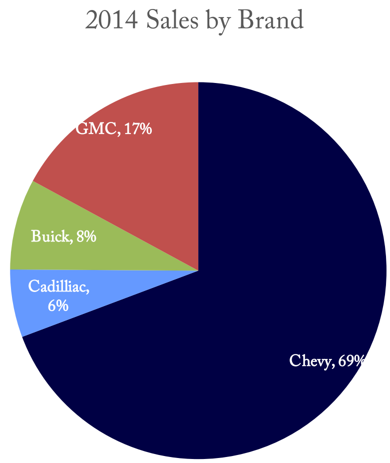


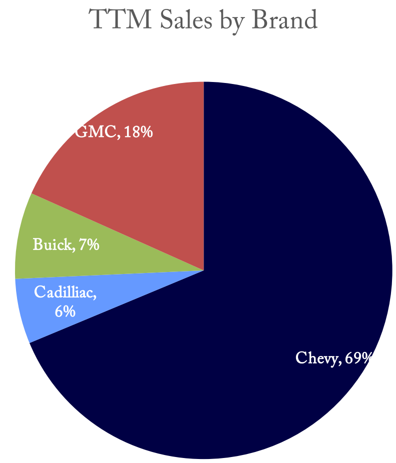






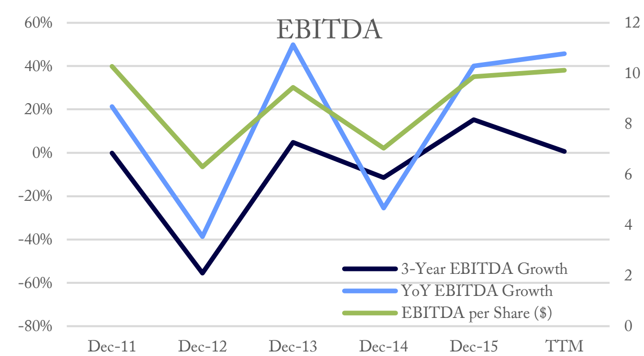




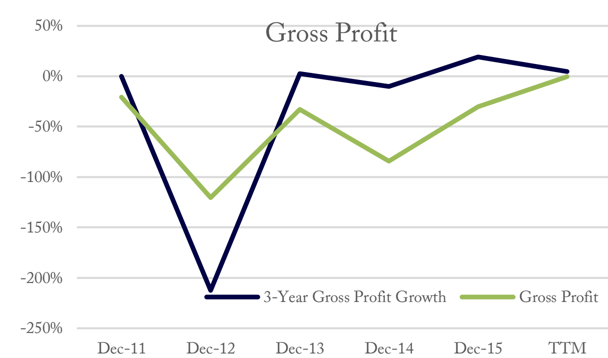


There have also been similar trends seen in the specific brand sales of GM. As seen in the pie charts above, highest sales are seen in brands that have the most truck options. Overtime, Chevy sales have dominated and stayed consistent, but GMC sales have increased since 2010 as they offer more fairly priced SUV and pickup options when compared to Cadillac and Buick.

Gross profit and EBITDA growth have different trends. While both currently see high percentiles in the 3-year growth window, the values themselves have fluctuated quite dramatically since 2011. Therefore, although there appears to be positive growth at the moment, it is hard to draw a conclusion as there has been no constant trend and therefore, both of these numbers could jump in either direction in future years. This variability for EBITDA and gross profit are charted left and below.



Two other items of significance are long-term debt growth and growth in the cash flow items. 3-year growth in long-term debt is below its historic median, in its 37th percentile, implying that GM is still taking on significant debt. This is also illustrated in the cash to debt ratio, which is at an all-time low of 0.43, implying that debt significantly outweighs cash on hand. Cash flow from investing has increased in negativity by 26.6% in the 3-year window meaning that GM is investing in the growth of the company with investments in items such as capital expenditures, which has seen 3-year growth of 5.9%. Lastly, cash flow from financing has increased in positivity over the past three years by a rate of 72.1%, its highest increase on record. This number has increased due to the large amount of borrowing GM has done over the past few years as it continues to invest in the business – presumably to retool as it shifts its production in the direction of consumer tastes.



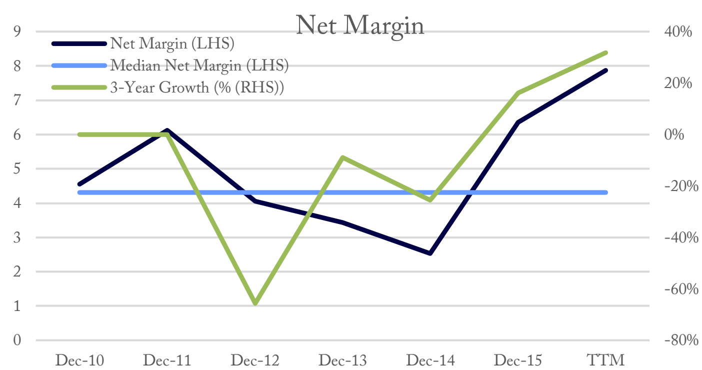
Lastly, turning to analysts' forecasts on earnings and earnings estimates for competitors, GM is expected to see negative earnings growth along with its nearest competitors, Ford and Toyota. While this negative earnings growth helps explain the forward PE of 5.22, there is still hope that GM's recent revenue growth and adaptation to the industry could point to future positive growth in other areas besides earnings. Earnings numbers and growth estimate can be found in the table to the right.

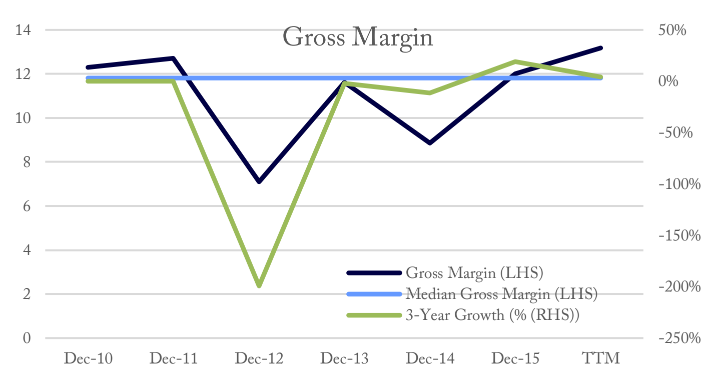
	EPS Current	EPS Estimate Next Year	Implied Earnings Growth
GM	7.81	5.82	-25%
F	2.12	1.88	-11%
TM	14.37	11	-23%
HMC	1.81	2.88	59%
TTM	2.44	4.6	89%
KNDI	0.18	N/A	NA
BLBD	0.95	1.31	38%

Overall, GM has adapted to the industry by selling the more desirable SUVs and pickup trucks resulting in favorable revenue growth. While it is difficult to derive conclusions regarding EBITDA and gross profit, both look promising as recent spikes have been less drastic than previous years, perhaps pointing to longer-term stability. A few areas of concern are their debt situation, which has been growing steadily and has outgrown their cash supply, and their future earnings growth of -25%. These two items should be watched closely as they will say a lot about the future of GM.

Profitability

Gross, operating, and net margins are at all-time highs illustrating how GM is able to produce a significant profit from sales. As mentioned previously, GM has moved towards higher concentrations of pickup truck and SUV sales in order to keep up with consumer demands. These vehicles happen to also have higher profit margins than cars and other vehicle types. For pickup trucks, luxury trim packages are in high demand, which add to the price ticket but not as much to the manufacturing costs. Additionally, fewer materials are needed when manufacturing pickups as the truck only consists of a cab and bed, and therefore, companies can earn larger profits having contributed fewer materials. SUVs are also very profitable as luxury SUVs and luxury packages affect prices in the same way as they affect pickup trucks. Essentially, manufacturers are taking the body style and frame of lower end SUVs and adding packages that add to the price but not necessarily manufacturing costs. Below are graphs of GM's net margin, which showcases the percent of profits being extracted from revenue, and gross margin, which shows the amount of revenue retained after incurring direct costs. These charts illustrate that both have been growing over the past few years in conjunction with the industry shift toward trucks.





Return on assets and return on equity are at all-time highs with GM creating value as evidenced by the 6.9% value of the weighted average cost of capital. These numbers along with the high profit margins paint a positive picture in regards to GM's profitability.

Liquidity, Leverage, and Activity

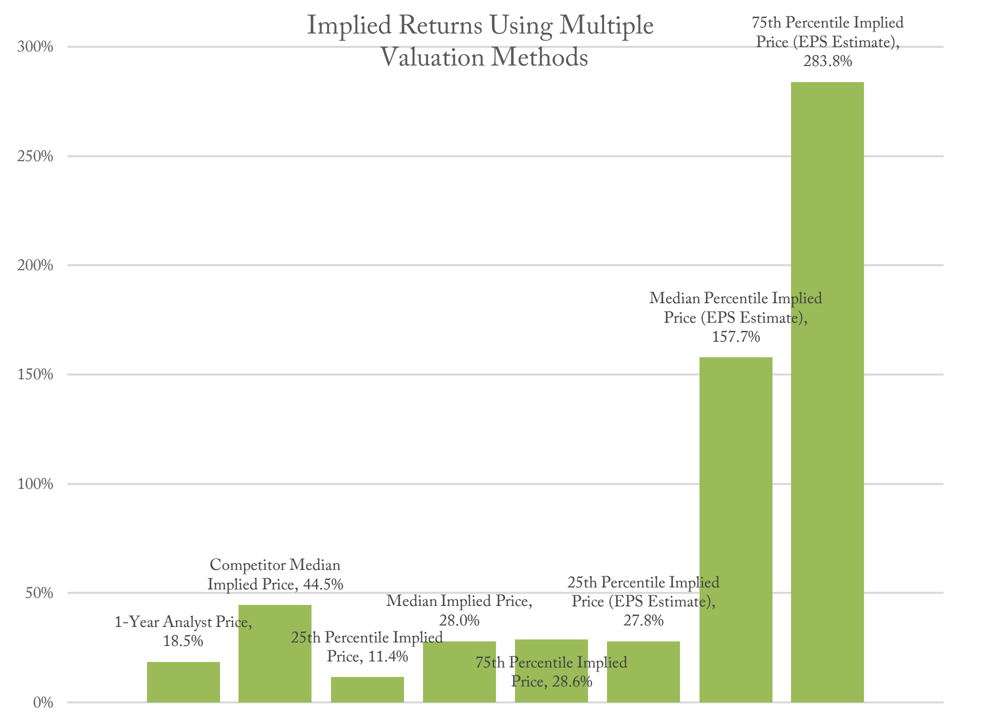
Interest coverage is currently at an all-time high as GM has the earnings to pay off their interest expenses, but current and quick ratios tell a different story with historically low values as liabilities have exceeded assets. Cash to debt is at an all-time low with a value of 0.43 illustrating that GM has taken on more debt than it has immediate cash available. A table of some of these balance sheet items (units in millions) can be found to the right showing low cash values relative to both current debts and accounts payable and increasing liabilities that have surpassed assets.

	6/30/2016	3/31/2016	12/31/2015	9/30/2015
Accounts Payable	54,813	53,599	51,904	55,737
Short/current long term debt	1,031	832	817	641
Long term debt	8,789	9,946	7,948	8,503
Total Current liabilities	76,043	74,987	71,466	72,739
Total liabilities	166,819	162,686	154,649	154,362
Cash and cash equivalents	20,518	16,610	16,828	16,952
Total current assets	74,630	71,034	78,007	82,341

There is also concern seen in the Altman Z-score, which is a forecaster of bankruptcy up to two years prior to distress. Dividend payout ratio is at an historic low as earnings seem to be pushed back into GM rather than to its shareholders. Lastly, days sales outstanding, days accounts payable, and days inventory are at historic highs for GM. While not too far above their maximum historic values, it is still important to keep an eye on these numbers as further increase should bring about concern.

Conclusion

The chart to the right details implied expected returns using the multiple valuation methods discussed above. For example, GM is expected to return 18.5% if analyst's consensus price estimate one-year from now is correct.



Considered using median expectations; if General Motor's valuation ratios, such as PE, P/S, P/S, etc. were to reach median historic values, investors would realize a price of $39.47 and earn an 28.0% return (represented at right by "Median Implied Price"). The same can be seen for valuations using the 25th and 75th historic percentiles (gaining 11.4% and 28.6% respectively). Given the current state of GM and its valuation below median levels, it's current price of $30.86 points to an undervalued firm. However, there are some red flags within GM such as high and growing debt and limited cash flow.

Turning to competitor valuations implies a price of $44.55. In this case if GM were to equal the average competitor valuations, investor would see a 44.5% return. As auto companies seem to compete very directly, it is possible that GM may push to reach similar valuations compared to their close competitors.

The chart above also details return expectations based on EPS estimates and the historic 25th, 50th, and 75th percentiles of valuation. These indicate a return anywhere from 27.8% to 283.8% for investors, with a median of 157.7%.

Recommendation

Currently, GM's low valuation can be explained by a number of variables. First, their low value may be attributed to their high beta value of 1.65 as this make GM a risky investment relative to the overall market. There is also the notion of vehicles being a non-staple item and with the FED's intention of raising interest rates as early as September, there is certainly some risk associated with investing in GM. Additionally, GM has a large amount of debt and limited cash, which could jeopardize their future. However, the positives show steadily growing revenue over the past few years as they have adapted to please the consumer and put forth a reliable, profitable line of vehicles. Lastly, margins look good as of late with positive growth and all-time high profitability for gross, operating, and net margin. Therefore, Eunoia Financial recommends investors **BUY** General Motors as low valuations, decent growth, and positive profitability suggest promising returns.