

Rating
Hold

Company
Cummins

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Industrial
Large Engines & Turbines

Date
18th of November 2013

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Great company at a fair price, hold

- We issue a **HOLD** for Cummins as the stock is fairly priced, and is backed by a strong management team with a solid historic performance.
- Our forecast places confidence in Cummins' growth over the near-term, but is **within 11% of the current market-valuation**.
- We expect the company's revenue to grow at **6.5% CAGR** from 2014 to 2017 and EBITDA margin of **15%** during the same period
- Company revenues are **sensitive to nominal economic growth**, statistical analysis forms basis of revenue projections.
- Clear and compelling strategy and good operational performance, but **volatile market demand** and **significant uncertainty** balance our projection.
- Whereas most market analysts are excited about management's recent announcement of 5-year goals, we feel that the **stock is fairly priced** and those goals, could result in more volatility.

Forecasts and Ratios

Year End	2013E	2014E	2015E	2016E	2017E
Full Year EBITDA (USDm)	2,404	2,620	2,799	3,011	3,252
Revenue (USDm)	16,814	17,470	18,658	20,076	21,682

YTD Relative Performance



Stock Information

Price at 15 th of Nov	132.04
Price target	120
52-week range	139.2-96.8
Dividend Yield	1.9%

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Company Overview

Cummins designs, manufactures, distributes and services diesel and natural gas engines and engine related component products. The company operates in four segments: Engine Manufacturing, Distribution, Components Manufacturing, and Power Generation Manufacturing. The company has been operating since 1919 in 190 countries, through 600 distributors, and 6,500 dealers.

Business Model

Although the company operates in four segments, all of them except Power Generation, are highly dependent on the global truck and bus market. Figure 1 shows Cummins' revenue split by end market in 2012 based on our estimations of the company's reported data. We estimate that 48% of the revenue is dependent on the market for Trucks and Buses. Then 21% comes from Power Generation, where the company's current focus is on medium sized industrial independent power stations. Finally 31% of the revenue comes from selling engines, parts and services to the construction sector, various industrial applications and governments.

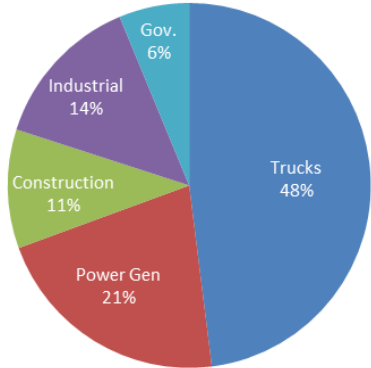


Figure 1: 2012 revenue split by end market, source Cummins 10K and presentations and author estimates

Now Cummins has traditionally had a very American image and the majority of the company's revenue has been within the US. As we can see in Figure 2 this has changed very little from 2013. There is change over the period, as the US part of the business shrinks from 53% of revenue to 47%.

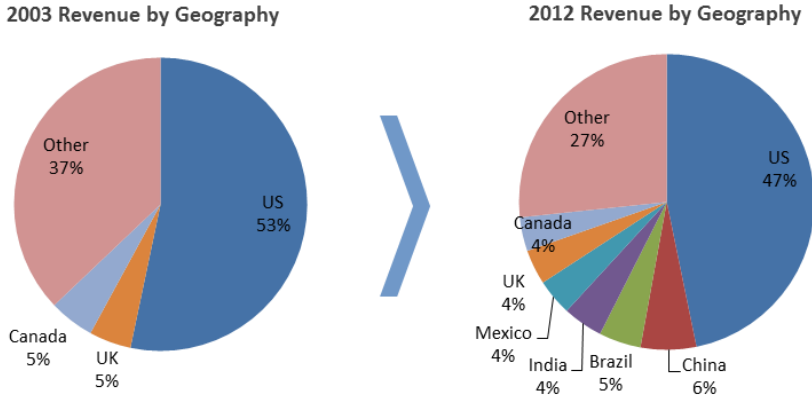


Figure 2: Revenue split by geography, source Cummins 10K

Figure 3 shows the development of Cummins cost structure from 2006 to 2012. The company does not break down the cost of goods sold, which make it a black box and harder to estimate likely changes going forward. There is a notable shift however in the costs over the period, as COGS drop from an average of 79.5% of revenue in 2006 to 2009 to an average of 75% of revenue from 2010 to 2013.

Research and development expense on the other hand has been on the rise, going above 3% of revenue for the first time in 2009 and reaching a record high of \$725 million or 4.2% of revenue in 2012.

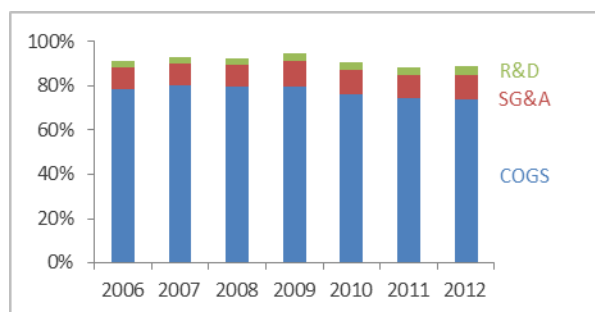


Figure 3: Development of cost structure, source Cummins 10k

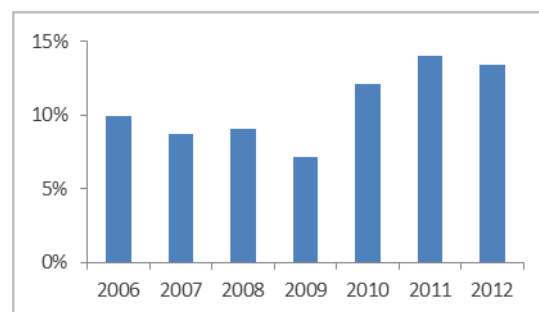


Figure 4: Cummins EBIT margin 2006 to 2012, source Cummins 10k

Figure 4 shows the company EBIT margin over the last couple of years. Management includes the income from non-consolidated joint ventures in its EBIT numbers, so we do so as well to ease comparison. Recent expansion in the EBIT margin, from an average around 9% to a new average around 13%, can be traced to successful cost cutting and boosted efficiencies in the company's supply chain.

Management's Goals

Management has historically set very ambitious goals for the company and in its 2011 forecast it expected revenue in 2015 to reach between \$26 and \$30 billion with 16-18% EBIT margins. These forecasts proved to be overly optimistic and management has revised them downward since. However, we feel the current forecasts resemble the ones made in 2011 and view them more as targets than realistic baseline forecasts. Therefore we take managements forecasts from the investor day in September of 2013 with a grain of salt. Table 1 summarizes management's growth plans from 2013 to 2018.

Table 1: Management's revenue CAGR 2013 to 2018, source Cummins Analyst day

	Engines	Distribution	Components	Power Gen.	Total
Global GDP			3-4%		3-4%
Mkt. Growth	1%	-	-	0-2%	-
New Prod.	2-3%	2-3%	2-4%	2-4%	2-3%
Mkt. Share	1%	-	1-2%	1-2%	1-2%
Emission/Price	1-2%	1%	2-4%	-	1%
Acquisitions	-	9-11%	-	-	1-2%
TOTAL	8-11%	15-19%	8-14%	6-12%	8-12%

There are four areas where management is focused on to drive growth in the coming years. First, they want to expand their portfolio of natural gas engines, but they think the market for natural gas engines will grow faster than the diesel engine market in coming years. Second, they expect their leading position in emission friendly engines will lead to growth in their component segment and price increases in the engine segment. Third, they plan to broaden the product portfolio in the power generation market, targeting the residential market and bigger industrial users. Fourth, they plan to grow the distribution segment by buying out their partners in joint ventures.

Further, they plan to expand the EBIT margin from 13.5% in 2012 to 16-18% in 2018, which represents an EBITDA margin of 18-20% based on the company's historical depreciation and amortization.

Forecast

Because Cummins' different business segments rely on the same end markets, we will not break our valuation into segmentation. Further, because all the end markets are traditionally thought of as pro-cyclical, we based our projections on nominal economic growth. We then compare our forecast to Cummins' past average growth rates and to other market participants forecast for Cummins end markets.

Finally we will estimate Cummins EBITDA forecast, based on the industry structure and the company's recent performance in terms of stability of margins.

Revenue Forecast

Our thesis was that Cummins' revenue is highly dependent on the status of the economy. We therefore performed some statistical analysis of Cummins revenue and economic growth numbers. Appendix I outlines the results of the analysis.

First we did a regression of the annual change in Cummins revenue as the dependent variable and nominal GDP growth rate of the US economy as the independent variable, for the period 1988 to 2012. Figure 5 shows the result of the regression and we can see that the co-efficient is statistically significant with a t-statistic of 2.3, but the intercept is not.

	<i>Coefficients</i>	<i>Std. Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-5.9%	6.5%	-0.91	37%	-19%	8%
Nominal US GDP	2.57	1.11	2.31	3%	0.26	4.88

Figure 5: Regression results of Cummins % change in revenue and nominal GDP growth in the US

Because Cummins' revenue sources are not all in the US we also wanted to perform a regression that better captured the company's geographic exposure. We only had information on the company's geographic revenue split from 1998 to 2012, during that period the split between the US and the rest of the world was around 50-60% US and 40-50% rest of the world, with the beginning of the period having a split of 60/40 and then reaching 50/50 by the end. Based on that data we made the assumption that before 1998 the revenue split would be more tilted towards the US and therefore we created a blended

GDP growth index of 60% US Nominal GDP growth and 40% Nominal GDP growth for the rest of the world. Figure 6 shows the results of the regression and we see that the t-statistic for the co-efficient is 2.5 and for the intercept -1.4. It must be noted that the statistical significance of the results is highly dependent on one data point, which is the most recent recession. If we remove that observation from the data set the slope of the regression lines drop below one and are no longer statistically significant.

	<i>Coefficients</i>	<i>Std. Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-10.3%	7.6%	-1.36	19%	-26%	5%
60% US & 40% World ex. US	2.75	1.08	2.54	2%	0.51	5.00

Figure 6: Regression results of Cummins % change in revenue and an index of Nominal GDP growth with 60% weight on the US and 40% weight on the rest of the world

To get a better sense for the relationship between GDP growth and revenue growth and because of the sensitivity of our dataset to one observation, we also looked at how the CAGR over the period 1988 to 2012 compared to the growth rate of the US and World economy. Figure 7 summarizes the results of that analysis and we can see that over the period 1988 to 2012 Cummins grew on average 0.5% faster than the economies it operated in. When we look at the period before 2000, we see that Cummins grew slower than the economies it operates in while during the period from 2000 to 2012 it has grown a lot faster.

	CAGR		
	88-'12	88-'00	00-'12
CMI revenue	7.1%	5.9%	8.4%
US nominal GDP growth	5.3%	6.5%	4.2%
World nominal GDP growth	6.3%	6.5%	6.1%
World ex US nominal GDP Growth	8.5%	8.9%	7.5%
60% US & 40% World ex. US nominal GDP growth	6.6%	7.5%	4.9%

Figure 7: Cumulative average growth rate of Cummins revenue and Nominal Growth rates of the US and the World, source IMF database and Capital IQ

We use our estimation to forecast Cummins revenue growth from 2013 to 2017. For the full year of 2013 we use management's guidance, as we believe it should be fairly accurate with so little left of the year and for 2018 and 2019 we adjust the growth to reach the terminal growth rate we estimate for the company. We used the IMF's forecasts to estimate nominal growth in the US and the World excluding the US from 2013 to 2017. Figure 8 shows the cumulative average growth rates based on these estimates. We decided on using the mixed annual growth rate estimate as our forecast for 2014 to 2017.

Cummins revenue CAGR 2013-2017	
Estimation using reg. of US nominal growth	7.0%
Estimation using reg. of Mixed nominal growth	6.5%
Estimation using spread over blended growth	6.7%

Figure 8: Estimated cumulative average revenue growth

Figure 9 shows our sales forecast for Cummins over the years 2013 to 2017. In 2018 and 2019 we drop the growth rate to our estimate of the company's terminal growth rate.

Sales Forecast (\$ million)	2012A	2013E	2014E	2015E	2016E	2017E
Revenue.....	17,334	16,814	17,470	18,658	20,076	21,682
% annual growth		-3.0%	3.9%	6.8%	7.6%	8.0%

Figure 9: Revenue forecast for Cummins 2013 to 2017

For the terminal growth rate we looked at the OECD's long term GDP forecast, which forecasts GDP rates in 2060. It expects the US economy to grow at an average annual rate of 1.9% from 2015 to 2060 and the rest of the world to grow at an average annual rate of 2.9% over the same period. We then looked at the historical average inflation rate in the US,¹ which has been 2.4% since 1993 and also since 2003. However, the IMF forecasts average annual inflation in the US to be below 2% for the next five years and therefore we expect the annual inflation for the US in the next 20 to 30 years to be a little lower than those historical averages. Our estimate for future inflation is therefore 2.2% which gives us nominal growth rates of 4% and 5.1% for the US and World respectively and a mixed nominal growth rate of 4.5%. We don't believe our forecast method would be appropriate for such a long term forecast. We therefore choose 3.5% as a base case, which is a number midway between inflation and the nominal GDP growth. We believe this is a good best guess as the markets Cummins competes in are mature and will not be among the fastest growing in the economy, but they will grow faster than inflation due to their strong correlation to the economic growth, which we believe will not be broken soon. In the valuation chapter we do a sensitivity analysis of this estimate to see what effect a growth rate closer to inflation or the GDP growth has on our target share price.

In our forecast we assume that the unconsolidated interests Cummins has in numerous joint ventures in manufacturing and distribution grow at the same rate as the consolidated company.

EBITDA Margin

As noted above, management has been successful in improving the EBITDA margin of the company in the last couple of years from an average of 11% between 2006 and 2009 to an average of 15% between 2010 and 2012. They have further made ambitious plans to improve them to around 18% by 2015 and 20% in 2018. We are skeptical that management will achieve this in the next couple of years, as we think volatility in financial markets coinciding with the feds tapering will result in turbulence in emerging market product markets. On the flip side we are impressed by the stability of margins during the recession and therefore don't expect the margins to come under pressure during the forecast horizon. We therefore forecast the EBITDA to be at the low end of management's guidance for 2013 and then increase back to the past average of 15% and stay there for the remainder of the forecast period. Figure 10 summarizes the EBITDA forecast for the company.

¹ Bureau of Labor Statistics, Consumer Price Index – All Urban Consumers, Series ID CUUR0000AA0

EBITDA (\$ million)	2013	2014	2015	2016	2017
EBITDA	2,404.4	2,620.5	2,798.6	3,011.3	3,252.3
Margin	14.3%	15.0%	15.0%	15.0%	15.0%

Figure 10: EBITDA forecast

Risks

There are 3 primary risks associated with Cummins' future performance:

1. Chinese and Emerging Market JV's for manufacturing Cummins products
2. Shifting focus on servicing customers in emerging markets
3. Aggressive growth and cost goals in the face of heavy investment on environmental standards

Cummins has made strong bets on Joint Venture agreements with companies in both North America (primarily for distribution) and Asia (primarily for manufacturing). We are particularly concerned about Cummins' partnerships with Chinese and Emerging Market companies to manufacture their products. While Cummins owns a controlling stake in most of its Joint Ventures, they are operating in countries with weak legal and contractual enforcement infrastructure and with partners who have strong incentive to copy or replicate their intellectual property. While their primary manufacturing partners (Dongfang, Tata, and Chongqing) are all large companies with value-added skills, infrastructure, and local capability, they only account for about 60% of revenues from Joint Venture agreements in the manufacturing sector. The remaining 40% of revenue comes from dozens of much smaller companies that stand to gain much more by learning manufacturing techniques from Cummins. We are concerned that Cummins, which competes on quality, durability, efficiency, and other technology-focused attributes, will ultimately lose its competitive advantage by training fledgling competitors.

In addition to expanding its manufacturing operations to emerging markets, Cummins is expanding a much greater share of focus on sales in emerging markets. From our valuation analysis, this decision seems to make quite a bit of sense. The world economy's nominal growth rate is outstripping the US GDP largely due to China and India's growth. While China and India are large economies with great potential, they are also highly sensitive to market volatility. This is especially true for high value, high cost durable purchases, like trucks or power systems. Since 2011, for example, Cummins' power systems segment has had steadily declining revenues because, although there is growth in sales in the United States, Indian and Chinese sales have declined significantly. This change has driven down revenues by 7%-13% per year. Since much of this volatility comes from market volatility in emerging markets instead of inherent volatility, Cummins is possibly exposing itself to a higher risk premium. Finally, our historic analysis shows that, on average, since the 1980's, Cummins has growth at a rate of 0.5% faster than its local economies, on average. That said, historically, Cummins has operated in stable economies with strikingly different business and legal landscapes. By taking such a strong stance on Emerging market growth, Cummins is exposing itself to higher risk.

Finally, Cummins is investing heavily in clean manufacturing technologies and environmentally friendly operations. They are accomplishing this through acquisition as well as investing in their operational processes. Given current regulatory trends, we think their efforts show smart decision-making. We are very concerned, however, that their efforts are at odds with their management goals. In the face of necessarily higher manufacturing costs, management has set goals of 16%-18% EBIT margins, which they have rarely attained in the past. We are concerned that this projection is too ambitious.

Factoring these risks into our valuation, we have discounted our expected EBITDA margins from the baseline presented by management and used by other market-analysts.

Valuation

Figure 11 shows the forecast of the business. The forecast for the years 2013 to 2017 is based on the forecasts presented above, while the forecasts for 2018 and 2019 are based on the 2017 forecast and a growth rate equal to the terminal growth rate of 3.5%. This is to ensure that the business has reached the terminal growth rate of Free Cash Flow before we apply the Gordon growth formula.

	2013	2014	2015	2016	2017	2018	2019
Sales.....	16,814.0	17,469.7	18,657.7	20,075.6	21,681.7	22,440.6	23,226.0
Cost of Goods Sold.....	12,795.4	13,154.7	14,049.2	15,117.0	16,326.3	16,897.7	17,489.2
SG&A (incl. depr).....	1,597.3	1,659.6	1,772.5	1,907.2	2,059.8	2,131.9	2,206.5
R&D expense.....	672.6	698.8	746.3	803.0	867.3	897.6	929.0
Income from JVs.....	(336.3)	(349.4)	(373.2)	(401.5)	(433.6)	(448.8)	(464.5)
EBIT.....	2,084.9	2,306.0	2,462.8	2,650.0	2,862.0	2,962.2	3,065.8
Taxes.....	542.1	599.6	640.3	689.0	744.1	770.2	797.1
Profit after taxes.....	1,542.9	1,706.4	1,822.5	1,961.0	2,117.9	2,192.0	2,268.7
Depreciation and Amortization.....	302.7	314.5	335.8	361.4	390.3	403.9	418.1
Capex.....	320.2	348.4	456.4	408.8	546.9	525.3	543.7
Change in Accounts Receivable.....	(80.4)	93.1	168.7	201.4	228.1	107.8	111.5
Change in Inventory.....	(119.3)	82.0	148.5	177.2	200.8	94.9	98.2
Change in Accounts Payable.....	(44.3)	50.5	91.5	109.2	123.7	58.4	60.5
Change in Accrued Expenses.....	(65.5)	72.1	130.7	156.0	176.7	83.5	86.4
Change in Prepaid Expenses.....	(42.7)	13.1	23.8	28.4	32.1	15.2	15.7
FREE CASH FLOW.....	1,657.9	1,606.9	1,583.1	1,771.8	1,800.7	1,994.7	2,064.5
Growth in FCF.....		-3.1%	-1.5%	11.9%	1.6%	10.8%	3.5%
PPE.....	3,110.6	3,144.6	3,265.1	3,312.5	3,469.1	3,590.5	3,716.2
Accounts Receivable.....	2,387.6	2,480.7	2,649.4	2,850.7	3,078.8	3,186.6	3,298.1
Inventory.....	2,101.7	2,183.7	2,332.2	2,509.5	2,710.2	2,805.1	2,903.2
Accounts Payable.....	1,294.7	1,345.2	1,436.6	1,545.8	1,669.5	1,727.9	1,788.4
Accrued Expenses.....	1,849.5	1,921.7	2,052.3	2,208.3	2,385.0	2,468.5	2,554.9
Prepaid Expenses.....	336.3	349.4	373.2	401.5	433.6	448.8	464.5

Figure 11: Summary of Cummins forecast

For balance sheet items we base our forecast on historical numbers. For Accounts Receivable we calculate number of days outstanding, based on the average balance between the beginning of the period and the end of the period and compared to the sales during the period. For Accounts Payable and Inventory we use the same method, but compare the balances to Cost of Goods Sold. For other items we use historical averages of percentage of sales.

Cost of Capital

To calculate the company's all equity cost of capital we used Cummins' own equity beta rather than an average asset beta of comparable firms. The reason for this choice is that the company's main competitors have a very different business model than Cummins. On one end there are very large automobile manufacturers like Daimler and Ford that are much bigger than Cummins. On the other end we have smaller companies like Deutz, which are just a tenth of Cummins size.

Therefore, in estimating the all equity-financed cost of capital for Cummins we calculated the firm's equity beta with 5 years of historical data and tracked it over a 5 year period. We used the MSCI World Index as a benchmark and the short term Treasury bill for the risk free rate, as we are viewing the investment for an US based investor. The equity beta has been trending downwards during 2013 and currently stands in 1.4, this is opposite to what we would expect based on company's increased emerging market exposure. We therefore chose an equity beta of 1.6, which is lower than the historical average of 1.74 but assume a slight reversal of the current downward trend in the beta.

All Equity Discount Rate	
Value of Debt.....	1,793.0
Common Stock (million).....	187.4
Closing share price.....	132.5
Value of Equity.....	24,828.6
Equity Beta (msci index).....	1.60
Cost of debt.....	0.037
Beta on debt.....	-
Tax rate.....	0.26
Asset Beta.....	1.50
Risk free rate - 10 yr gov bonds.....	0.026
Equity market premium.....	0.058
Cost of equity for all equity financed firm.....	11.30%

Figure 12: Cummins cost of capital

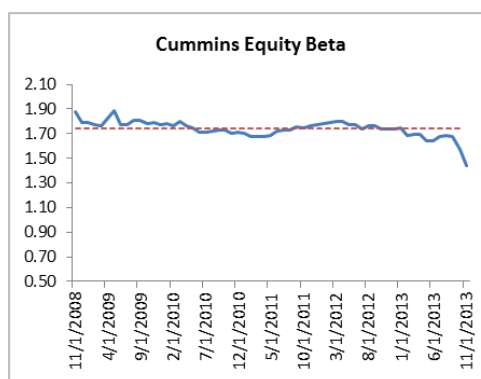


Figure 13: Cummins Equity Beta

We then calculated the company's asset beta using the formula for a constant amount of debt. Historically, the company has kept a relatively constant amount of debt during 4-5 period stints. In September it raised roughly \$1 billion in the bond markets, which it intends to use for the purchase of the rest of its joint ventures, prior to that Cummins had kept a stable debt balance around \$750 million for six years. We therefore expect Cummins to carry a balance close to the \$1.8 billion of debt during our forecast period. For cost of debt we used the 3.65% coupon on the 10 year bond it sold to investors two months ago. The rest of the inputs were the company's tax rate of 26%, which is based on management's estimate of their average tax rate and the risk free rate, where we used the current yield on 10 year treasuries.

These assumptions gave us a cost of equity for an all equity financed firm of 11.3%.

Target Price & Sensitivity Analysis

Figure 14 shows our base case valuation for Cummins with a target price of \$119 for the company at a 10% discount to Friday's closing price. For the value of the minority shares we found that the book value

of minority shares represents roughly 5% in the consolidate business total book value of equity. We thus calculated the value of the minority interest as 5% of the consolidated business equity value and subtracted it to get to the share price for Cummins shareholders.

		2013	2014	2015	2016	2017	2018	2019
	Percentage of year left	0.25	1	1	1	1	1	1
Free Cash Flow.....		414.5	1,606.9	1,583.1	1,771.8	1,800.7	1,994.7	2,064.5
Long term FCF growth rate.....								3.50%
Terminal Value in 2017.....								27,394.4
Present Value using Asset Cost of Capital.....	11.30%	403.5	1,405.6	1,244.2	1,251.1	1,142.4	1,137.0	15,087.7
Present Value with Mid Period Adjustment.....		409.0	1,482.9	1,312.7	1,319.9	1,205.3	1,199.6	15,917.3
Present Value of All Equity Cash Flows.....	22,846.6							
Tax Shields.....		4.27	17.1	17.1	17.1	17.1	17.1	17.1
Terminal Value of Tax Shield in 2017.....								657.00
Present Value of Tax Shield of Constant Debt..		4.24	16.54	16.12	15.71	15.32	14.93	574.17
With Mid Period Adjustment.....		4.26	16.76	16.33	15.92	15.51	15.12	581.59
Present Value of Tax Shield of Constant Debt..	665.5							
Total Enterprise Value.....	23,512.1							
Value of Cash.....	2,661.0							
Value of Debt.....	(1,793.0)							
Unfunded Pension Liability.....	(676.0)							
Value of Minority Interest.....	(1,185.2)							
Value of equity at end of 2012.....	22,518.9							
Stock Price.....	120.16							
Difference from Current Stock Price	-9.30%							

Figure 14: Valuation Base Case

Finally we performed sensitivity analysis on the terminal growth rate and discount price. We can see in Figure 16 that a slightly higher terminal growth rate of 4% and a discount rate of 10.5%, which would be the rate if we would have subtracted a risk premium of 1% from the 10 year risk free rate we arrive at a 5% premium to the current share price.

		Terminal Growth				
		2.50%	3.00%	3.50%	4.00%	4.50%
Discount Rate	10.50%	121.53	126.96	133.16	140.32	148.67
	11.00%	114.71	119.40	124.71	130.78	137.79
	11.50%	108.66	112.73	117.32	122.52	128.47
	12.00%	103.24	106.81	110.80	115.29	120.39
	12.50%	98.36	101.51	105.01	108.92	113.32

Figure 15: Share price, based on different terminal growth and discount rate

		Terminal Growth				
		2.50%	3.00%	3.50%	4.00%	4.50%
Discount Rate	10.50%	-8%	-4%	1%	6%	12%
	11.00%	-13%	-10%	-6%	-1%	4%
	11.50%	-18%	-15%	-11%	-8%	-3%
	12.00%	-22%	-19%	-16%	-13%	-9%
	12.50%	-26%	-23%	-21%	-18%	-14%

Figure 16: % difference from current price based on different terminal growth and discount rate

Appendix I

We ran two regressions with Cummins annual revenue growth from 1988 to 2012 as the dependent variable. First we ran a regression with the Nominal US GDP growth rate from 1988 to 2012 as the independent variable. In the second regression we had as independent variable a Nominal GDP growth rate weighted closer to Cummins geographic revenue mix, with 60% weight on the US GDP and 40% weight on the World GDP excluding the US.²

The results are highly dependent on one observation, which is the most recent recession. Without that observation, the results of our regressions are not statistically significant. However, we believe that times of economic hardship provide a lot of information about the operations of a company and therefore feel that this particular outlier contains a lot of relevant information.

US Nominal GDP

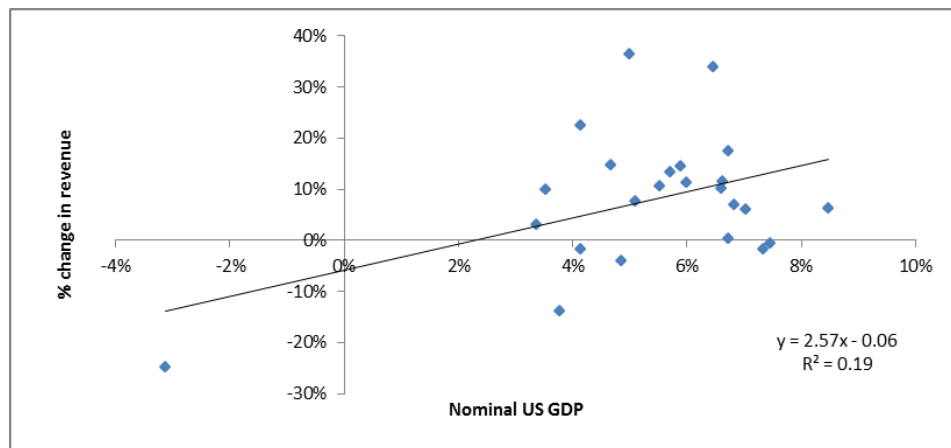


Figure 17: Regression of Cummins % change in revenue and US Nominal GDP from 1988 to 2012

	<i>Coefficients</i>	<i>Std. Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-5.9%	6.5%	-0.91	37%	-19%	8%
Nominal US GDP	2.57	1.11	2.31	3%	0.26	4.88

Figure 18: Regression results of Cummins % change in revenue and nominal GDP growth in the US

² Source IMF for GDP growth rates and Capital IQ for Cummins historical revenue

Blended Nominal GDP (60% US and 40% World ex. US)

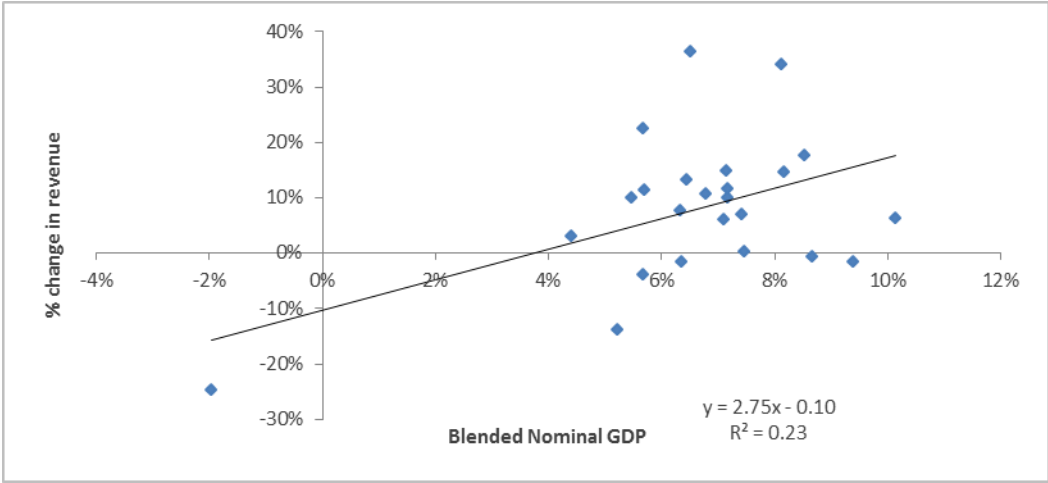


Figure 19: Regression of annual % change in Cummins revenue and Blended Nominal GDP growth from 1988 to 2012

	<i>Coefficients</i>	<i>Std. Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-10.3%	7.6%	-1.36	19%	-26%	5%
60% US & 40% World ex. US	2.75	1.08	2.54	2%	0.51	5.00

Figure 20: Regression results of Cummins % change in revenue and mixed nominal GDP growth

Appendix II – Summary of forecasts from customers and competitors

Below is a short summary of market forecasts for Cummins' key end markets made by PACCAR and Daimler, two of Cummins biggest buyers, and Generac, a leading generator player in the US market.

Truck Market

When looking at the market for trucks and buses, we looked at the expectations of two of the market's biggest manufacturers: PACCAR and Daimler. PACCAR estimates the total global market for trucks to grow at 4.4% CAGR from 2012 to 2017 or the total market to go from 2.65 million trucks to 3.3 million³. Our biggest reservation with PACCAR's forecast is that they believe the US truck market will grow at 4.85% and Europe 3.83%. These forecasts seem high compared to the global average. Daimler has its own estimates for the global truck market in the coming years, as it expects the total market to grow from 2.5 million to 3.2 million from 2012 to 2018 at an average CAGR of 5.0%⁴. The growth in their forecast is driven by emerging economies, as they expect North America, the Eurozone and Japan to grow at 1.7% CAGR over the period versus a 6.1% CAGR for the rest of the world.

We will make the assumption that the geographic split between revenue for Trucks and Buses is the same as with Cummins' engine segment. As the engine segment is the driver behind the distribution and component segments, we believe this is an acceptable assumption. That means that 62% of the truck and bus revenue is in the US, which makes it by far the biggest market for Cummins and the most important for forecasting purposes.

If we apply these percentages to the PACCAR and Daimler forecasts we get a revenue CAGR forecast for Cummins' Truck business of 4.8% from the PACCAR forecast and 2.7% from the Daimler forecast.

Power Generation

Generac estimates the market for industrial power generation to grow at a 4% CAGR from 2012 to 2018. Its forecast is based on research made by Frost and Sullivan, for the company.

³ PACCAR Investor Presentation November 2013

⁴ Daimler Trucks Division Day, 20th of September 2013

Important Disclaimer

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