

Analysis of Volkswagen Group financials 2011-Q2/2016- Effects of the emissions scandal on key financial ratios

Antti Westerlund

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Author(s) Westerlund Antti	
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Report/thesis title Analysis of Volkswagen Group financials 2011-Q2/2016- Effects of the emissions scandal on key financial ratios	Number of pages and appendix pages 37+9
<p>In September 2015 it was revealed that Volkswagen had installed software on cars that cheated in emissions tests. This thesis analyses Volkswagen Group 2015 financial performance compared to previous years 2011-2014 and Q2/2016. The aim is to establish how big of an effect the emissions scandal had on Volkswagen key profitability, solvency, liquidity ratios and investor ratios. To benchmark the 2015 ratios, they are compared also to BMW and Daimler which are Volkswagen Group's competitors.</p> <p>While 2015 stands out as the worst year for 2015 Volkswagen in terms of profitability, it seems that by Q2/2016 the company has already recovered to some extent, posting positive EBIT and net profit. When compared to BMW and Daimler, Volkswagen has been more profitable on average, judging by net profit and EBIT ratios, however, there is a decreasing trend, while BMW and Daimler are more stable.</p> <p>As for liquidity all companies are at a sufficient level. In terms of solvency, for Volkswagen there is a trend of long term debt increasing when compared to equity. This has worried investors, reflected in the lowered share price.</p> <p>For all companies, solvency rates are lower than the general level, which suggests that car manufacturing is a capital intensive industry and profits have to be reinvested, which also means lower dividend yields for investors. For investors, the P/E ratio of Volkswagen is at an enticing level, some analysts suggesting a value play for this year, meaning that the stock price is still at a low level but is expected to rise, creating value for the investor.</p> <p>Based on the key financial ratios the emissions scandal had a significant impact on Volkswagen in 2015, especially on profitability, mostly due to 7 billion euros paid in litigation fees. By Q2/2016 profitability of the company has recovered slightly but is still far from average especially in terms of Return On Assets and Return On Equity.</p>	
Keywords Financial statement analysis, ratio analysis, benchmarking	

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1 Introduction

In this chapter I will introduce the topic of my Bachelor's thesis, research question, investigative questions, key concepts and the theoretical framework.

1.1 Background

2015 was very tumultuous for Volkswagen Group as in September it was revealed that they had cheated on emissions tests through installing software on their cars that lowered emissions temporarily while the car is being tested. This ultimately resulted in the resignation of CEO Martin Winterkorn.

In this thesis I will calculate and analyse Volkswagen Group's key financial ratios for 2015 through comparing them with previous years and competitors Daimler Ag and BMW Group. The aim is to find out how big of an impact did the emissions scandal have on the company's profitability, solvency and liquidity.

From my personal perspective I found financial analysis the most interesting part of my specialization studies and I wish to learn more on the subject through writing this thesis.

It is to be expected that Volkswagen Group's financial position has weakened as a result of the crisis but how significantly is the main question.

1.2 Research Question

This thesis aims to establish what kind of an effect Volkswagen Group's emissions scandal had on their profitability, solvency and liquidity in 2015 compared to previous years and competitors BMW Group and Daimler Ag. 2015 figures will also be compared to 2016 half year report to see whether there is a continuing trend or not.

IQ 1. How different are VW's financial ratios in 2015 to previous years and Q2/2016?

IQ 2. How different are VW's financial ratios in 2015 compared to competitors BMW and Daimler?

IQ 3. How was the investor confidence in VW in 2015?

IQ 4. How big of an impact did the emissions scandal have on Volkswagen Group's key financial ratios in 2015?

Table 1 below presents the theoretical framework, research methods and results chapters for each investigative question.

Table 1. Overlay matrix

Investigative question	Theoretical Framework	Research Methods	Outcome
IQ 1.	financial statement analysis	desktop research	comparison to previous years
IQ 2.	financial statement analysis	desktop research/bench-marking	comparison to competitors
IQ 3.	financial statement analysis	desktop research/bench-marking	other factors
IQ 4.	financial statement analysis	desktop research	conclusion

1.3 Demarcation

In this thesis I will focus on key profitability, solvency and liquidity ratios of Volkswagen Group in 2011-2015 and compare them with key competitors Daimler Ag and BMW Group for the same years.

Prior years and other competitors are left out in order to keep a more focused and manageable scope.

1.4 Key Concepts

Annual report is a report which publicly listed companies publish, where the company gives shareholders information about the company's operations and financials for the year. (Investopedia 2016a.)

Consolidated financial statements are what a group of companies prepares where all internal transactions of the group are eliminated. (Deloitte 2016.)

Financial statement analysis is the practice of using analytical tools (for example ratios) for evaluating a company's financial performance over a period. It gives management or shareholders more accurate information about the company's financial position and makes it easier to compare different periods and companies. Analysis also provides the opportunity to predict future development to some extent. (Braun & Tietz 2015, 842; Accounting Tools 2016b.)

Profitability ratios are a set of ratios for evaluating the profit of a company compared to its costs and the investments made. (Investopedia 2016k.)

Solvency ratios are a set of ratios for evaluating the company's liabilities compared to its assets. (Investopedia 2016m.)

Liquidity ratios give an indication of how well the company can service its short-term debts. (Investopedia 2016h.)

1.5 Case Company

As my thesis will be a desktop thesis there is no beneficiary in the form of a case company. Volkswagen Group is German publicly listed corporation that manufactures different brands of vehicles. In 2014 the group revenue was around 202 billion euros with a net profit of 10.9 billion and it employed around 590 thousand people.

The group brands are: Audi (high end and mid-range cars), Bentley (luxury cars), Bugatti (luxury cars), Ducati (motorcycles), MAN (trucks and Lorries), Porsche (luxury cars), Scania (trucks and busses), Seat (mid-range cars), Skoda (mid-range cars) and Volkswagen (mid-range cars and vans). (Volkswagen 2016b.)

1.6 Research methods and process

In this sub-chapter I will map the information sources and research methods for my thesis.

1.6.1 Sources of information and methodology

The main source of information for the empirical research part of my thesis are the annual reports of Volkswagen Group, BMW Group and Daimler Ag.

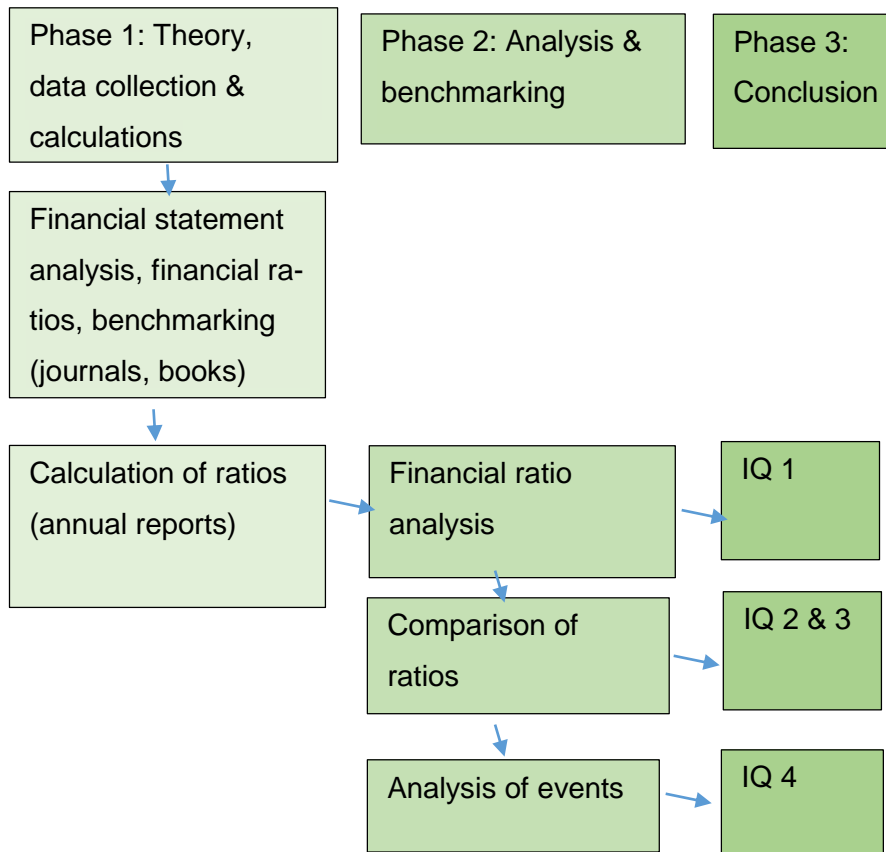
The research will mostly be secondary or so-called desk research in nature since most of the data is already available in the annual reports, which can be accessed online. I will gather the information needed to calculate the financial ratios from the annual reports.

I will also analyse and compare different events in the year 2015 that may have affected the financial ratios of Volkswagen Group, based on news and the annual report.

Another aspect of the thesis is benchmarking the financial ratios of 2015 against previous years and competitors, which will be the last part of the empirical research.

1.6.2 Research process

Figure 1. Picture of the research process



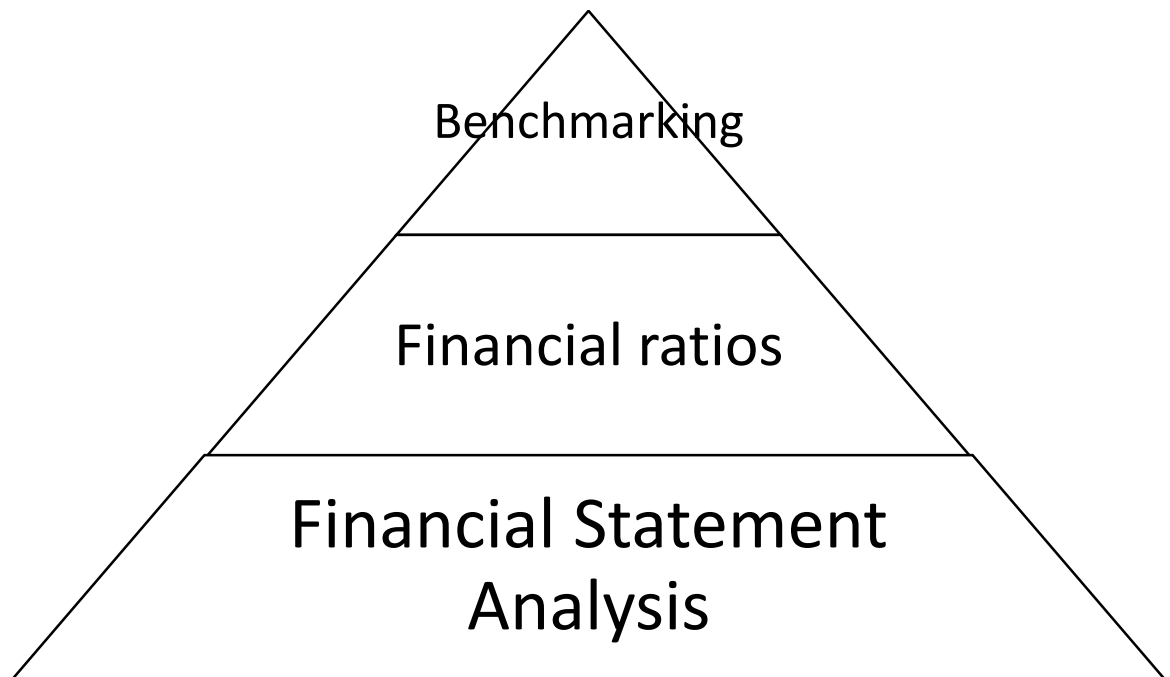
The table above illustrates the research process, starting with collecting data from the annual reports. Next I will calculate the financial ratios for each year. Then I will benchmark 2015 financial ratios with previous years and competitors. After that I will analyse the results. Lastly I will present a conclusion and evaluate the results.

2 Financial Statement Analysis through ratios & benchmarking

In this chapter I will introduce the theoretical framework for my thesis.

2.1 Financial statement analysis

Figure 2. Picture of the theoretical framework



As my thesis has to do with analyzing the financial statements companies, the most relevant theoretical concept is financial statement analysis.

Financial statement analysis is used by companies in order to compare financial performance over different periods and to find out what needs to be changed in order to be more profitable or to have a better financial standing in terms of debts or cash. It is also used by analysts and investors in order to evaluate potential companies to invest in.

Financial statement analysis can be performed through horizontal analysis, meaning comparing different periods or through vertical analysis, meaning comparing different elements of the income statement or balance sheet. (Braun & Tietz 2014, 842.)

In this thesis the method that is used will be ratio analysis since it makes the comparison between different periods and different companies easier.

2.2 Key financial ratios

Ratio analysis is one of the most commonly used financial analysis tools, especially when comparing different companies. Ratios that will be used in this thesis are listed below.

The main focus of the ratios is on profitability, which is the most important for any company. In the car industry, the key ratios that are used to measure profitability are ROE (Return On Equity) and (Return On Assets), generally investors want to see 12 to 15 % ROE margins. Debt-to-equity ratio is important for the long term solvency of the company since the industry requires continuous investments into R&D. Inventory turnover is also an important ratio for car manufacturers. (Maverick 2015)

2.2.1 Profitability

Profitability ratios give an indication of the company's returns on sales or investment.

Net profit %

Formula: $\text{Net profit/revenue} \times 100$

This ratio represents the company's net profit divided by revenue and gives an indication of how profitable the company is after all expenses and taxes are deducted. In effect, it tells how much profit the company earns on each euro of revenue it collects. In many retail businesses, net profit margins of 5 % or less are rather common while in manufacturing net profit percentages tend to be more towards 10 %. (Braun & Tietz 2016, 864; Investopedia 2016i.)

Gross profit Margin

Formula: $\text{Revenue-Cost of goods sold/revenue} \times 100$

This ratio represents the company's gross profit after cost of goods sold have been deducted and gives an indication of how much the company's markup is. Generally, gross profit margins tend to be at least 20 % or more. (Investopedia 2016e.)

EBIT %

Formula: $\text{Earnings before taxes and interest/revenue} \times 100$

The earnings before taxes and interest ratio represents the company's ability to generate profits from its operating activities, while ignoring financing. (Investopedia 2016c.)

Return on Assets

Formula: $\text{Net profit} / \text{Total assets}$

The return on assets ratio measures how efficient the company is at generating money with its assets. (Braun & Tietz 2016, 864)

Return on Equity

Formula: $\text{Net profit} / \text{Shareholder's equity}$

The return on equity measures the relation between the net profit and shareholder's equity, in essence it represents the profit generated by the money shareholders have invested. (Braun & Tietz 2016, 864)

Return on Capital Employed

Formula: $\text{EBIT} / (\text{total assets} - \text{current liabilities}) * 100$

Return on Capital Employed or ROCE measures the company's profitability and the efficiency at which its capital is employed. (Investopedia 2016n.)

2.2.2 Solvency

Solvency ratios indicate the company's financial position in terms of its equity in relation to long-term liabilities. The better the solvency ratios, the more security the company has against periodical weaker performance.

Equity Ratio

Formula: $\text{Equity} / \text{total assets} * 100$

This ratio represents the percentage of how much of the company assets shareholders would receive in case of liquidation. As a traditional rule of thumb, the companies usually have 40 % own equity. (Investopedia 2016m.)

Debt-to-assets ratio

Formula: $\text{Total liabilities} / \text{total assets} * 100$

This ratio measures the company's financial leverage. The ratio indicates how much debt a company is using to finance its assets relative to the amount of value represented in shareholders' equity. (Braun & Tietz 2014, 863.)

Net Gearing %

Formula: $(\text{Long-term liabilities} - \text{cash}) / \text{equity} * 100$

This ratio represents the relation between the company's equity to its long term debts. The higher the percentage, the more the company has long term liabilities in relation to its equity. 100 % would be balanced but anything over 150 % can be considered alarming. (Accounting Tools 2016c; Balance Consulting 2016b.)

2.2.3 Liquidity

Liquidity ratios give information on the short-term financial position of the company and its ability to service its short-term liabilities.

Quick ratio

Formula: $(\text{Current assets} - \text{inventories}) / \text{current liabilities}$

This ratio represents the company's ability to pay all of its current liabilities if they are due immediately. 1 is considered good, 1,5 excellent and 0,5 to 1,0 can be considered sufficient. (Braun & Tietz 2014, 863; Balance Consulting 2016c.)

Current ratio

Formula: $\text{Current assets} / \text{current liabilities}$

This ratio along with the quick ratio also measure the company's ability to pay its debts but it takes into account all current assets in relation to current liabilities. 1 to 1,5 is considered sufficient, 2 is considered good and 2,5 excellent. (Balance Consulting 2016a.)

Inventory turnover

Formula: $\text{Cost of goods sold} / \text{Inventory}$

This ratio represents the times the company sells its entire inventory in a year, meaning the more the better. There are no general guidelines for this but generally in retail businesses inventory turnover is slower than in manufacturing businesses. (Investopedia 2016f.)

2.2.4 Investor ratios

Investor ratios give the investors information on the profitability of the company in relation to the market price of the share.

P/E ratio

Formula: $\text{Market value per share} / \text{earnings per share}$

The price-to-earnings ratio represents the number of years in which the investor would recover their money if they invest in the company at the current price when compared to the company's latest earnings per share. The ratio is calculated by dividing the average market value per share by the year-end result per share. Usually P/E ratios are between 20-25, in the US stock market, in Finland P/E ratios average 15. P/E ratios can only be calculated from the latest full year report and only from positive results. (Investopedia 2016j.)

Dividend yield %

Formula: $\text{Dividend per share} / \text{price per share} * 100$

The dividend yield represents the percentage of return the investor gain from dividends, relative to the share price. The ratio is calculated by dividing the year-end dividend per share with the average price per share. Dividend yield can only be calculated from the latest full year report. (Accounting Tools 2016a.)

2.3 Benchmarking

Benchmarking means the comparison of a value with a set standard or in the case of this thesis, the 2015 financial ratios of Volkswagen to previous years and other companies. Benchmarking highlights differences between the values and makes it easier to assess where the differences arise from.

Benchmarking is used in financial statement analysis in order to find out how different the financial performance a certain period is to another. Comparisons to general rules of thumb or industry specific best practices are also commonly used in benchmarking financial performance. Usually there is a set baseline, for example specific period or a specific financial statement item which is compared to others. (Hornngren et al 2014, 749.)

In this thesis, the year 2015 is the baseline which will be compared to years 2011-2014 and Q2/2016 in order to see if there is a trend.

3 Analysis & benchmarking

In this chapter Volkswagen Group's financial performance in 2015 is compared to 2011-2014 and Q2/2016. The performance is also compared to competitors Daimler Ag's and BMW Group's performance.

3.1 VW 2015 performance compared to 2011-2014 and Q2/2016

3.1.1 Profitability

Volkswagen Income Statement 2011-2015

Table 2. Volkswagen Income Statement 2011-2015

€ million	2015	2014	2013	2012	2011
Sales revenue	213 292	202 458	197 007	192 676	159 337
Cost of sales	-179 382	-165 934	-161 407	-157 522	-131 371
Gross profit	33 911	36 524	35 600	35 154	27 965
Distribution expenses	-23 515	-20 292	-19 655	-18 850	-14 582
Administrative expenses	-7 197	-6 841	-6 888	-6 220	-4 384
Other operating income	12 905	10 298	9 956	10 484	9 727
Other operating expenses	-20 171	-6 992	-7 343	-9 070	-7 456
Operating result	-4 069	12 697	11 671	11 498	11 271
Share of profits and losses of equity-accounted investments	4 387	3 988	3 588	13 568	2 174
Finance costs	-2 393	-2 658	-2 366	-2 546	-2 047
Other financial result	773	767	-465	2 967	7 528
Financial result	2 767	2 097	757	13 989	7 655
Earnings before tax	-1 301	14 794	12 428	25 487	18 926
Income tax income/expense	-59	-3 726	-3 283	-3 606	-3 126
Current	-2 859	-3 632	-3 733	-4 196	-4 351
Deferred	2 800	-94	449	589	1 225
Earnings after tax	-1 361	11 068	9 145	21 881	15 799
of which attributable to					
Noncontrolling interests	10	84	52	169	391
Volkswagen AG hybrid capital investors	212	138	27	–	
Volkswagen AG shareholders	-1 582	10 847	9 066	21 712	15 409
Basic earnings per ordinary share in €	-3,20	21,82	18,63	46,41	33,1
Diluted earnings per ordinary share in €	-3,20	21,82	18,63	46,41	33,1
Basic earnings per preferred share in €	-3,09	21,88	18,69	46,47	33,16
Diluted earnings per preferred share in €	-3,09	21,88	18,69	46,47	33,16

In the above table Volkswagen's Income Statements 2011-2015 can be seen. The jump in sales revenue between 2011 and 2012 can be explained through the acquisition of Porsche. The same also explains the extraordinary financial results in those years.

After that sales revenue has grown quite steadily. Between 2012-2014, sales grew by 5 billion a year. From 2014 to 2015 sales revenue grew by a total of 10.8 billion euros. 5.4 billion of this growth was new car sales, 1 billion used car sales, 1 billion parts sales, and 3.7 billion leasing sales. It seems that despite the emissions scandal, Volkswagen was able to grow its sales significantly.

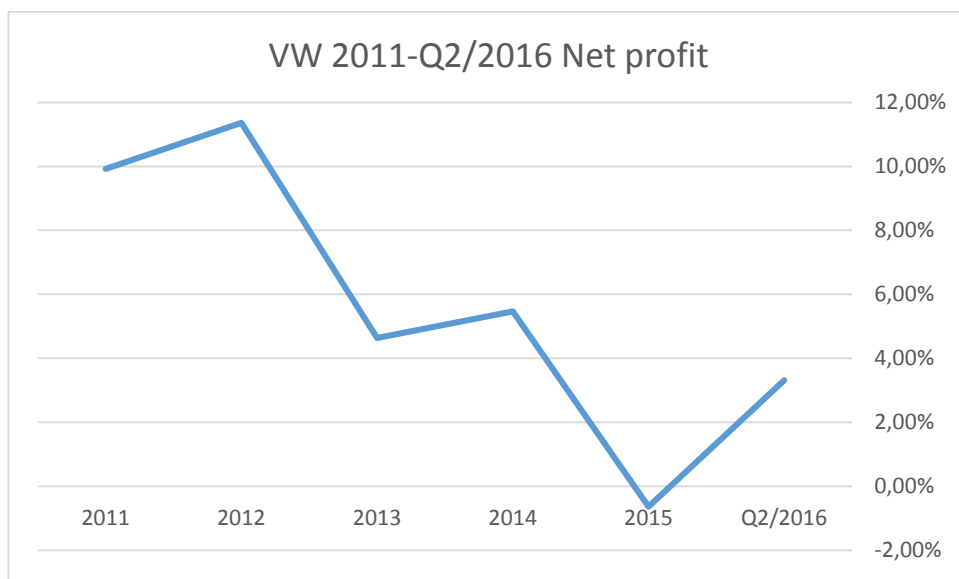
Operating result has been steady between 2011-2015 at 11-13 billion. 2015 stands out with an operating loss of 4 billion. This is mostly due to "Other operational expenses" growing to 20,171 MEUR, up significantly from 6,992 MEUR in 2014. 7 billion euros of these expenses were litigation fees related to the emissions manipulation issue and 5.3 billion were losses from foreign currencies and currency hedging derivatives. (Volkswagen 2015c.)

Net profit margin

Table 3. Volkswagen Group net profit % 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014
3,32 %	-0,64 %	5,47 %	4,64 %	11,36 %	9,92 %	7,85 %

Figure 2. Volkswagen Net Profit 2011-Q2/2016



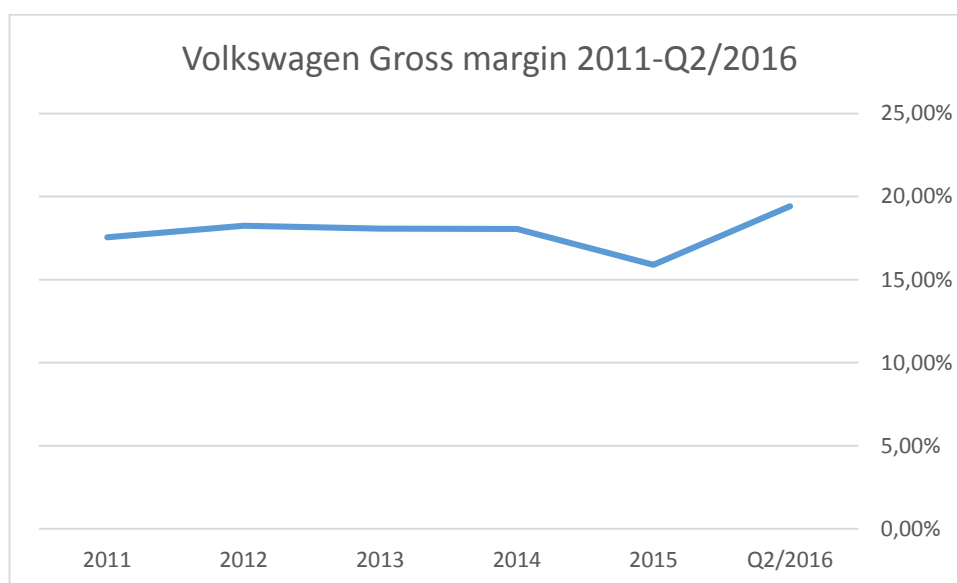
The above table and graph illustrate Volkswagen Group's net profit percentage between 2011-Q2/2016. When compared to previous years, 2015 is the only year Volkswagen had a negative net profit ratio. Although there have been significant fluctuations before, for example between 2012 and 2013, net profit dropped by 6.72 percentage points, the drop between 2014 to 2015 is also significant at 6.14 percentage points. However, it seems that already this year, 2016 Volkswagen has been able to recover, posting a positive net profit ratio of 3.32 % by Q2/2016. This, however, is only half year information and unaudited.

Gross profit margin

Table 4. Volkswagen gross profit margin 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014
19,42 %	15,90 %	18,04 %	18,07 %	18,25 %	17,55 %	17,98 %

Figure 3. Volkswagen Gross Profit Margin 2011-Q2/2016



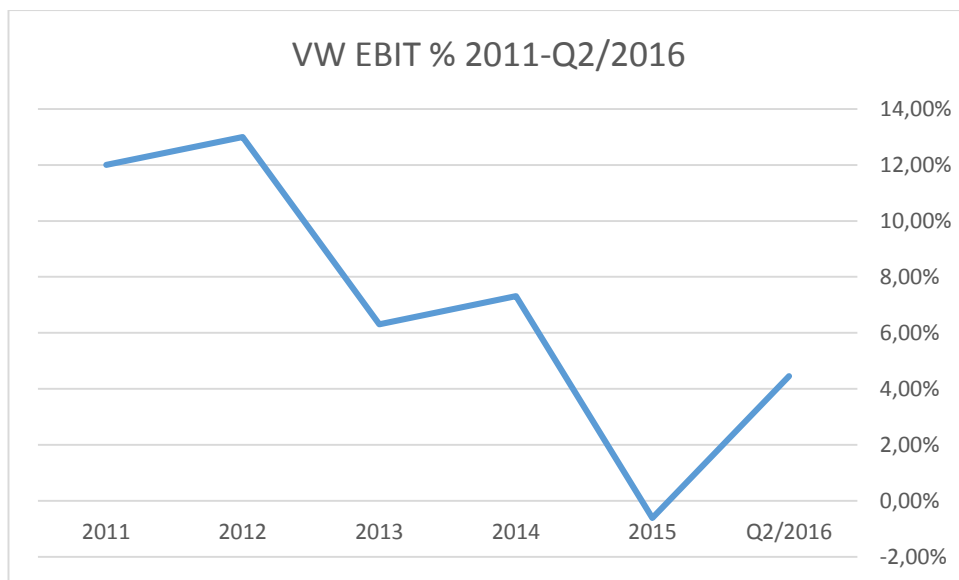
Volkswagen's gross profit margin has remained quite steady at around 18 % over the entire period. In 2015 the gross profit margin was 15.9 %, down from 18.04 % in 2014. By Q2/2016 VW already posted above average gross profit margin.

EBIT %

Table 5. Volkswagen EBIT % 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014
4,46 %	-0,61 %	7,31 %	6,31 %	13 %	12 %	9,68 %

Figure 4. Volkswagen EBIT % 2011-Q2/2016



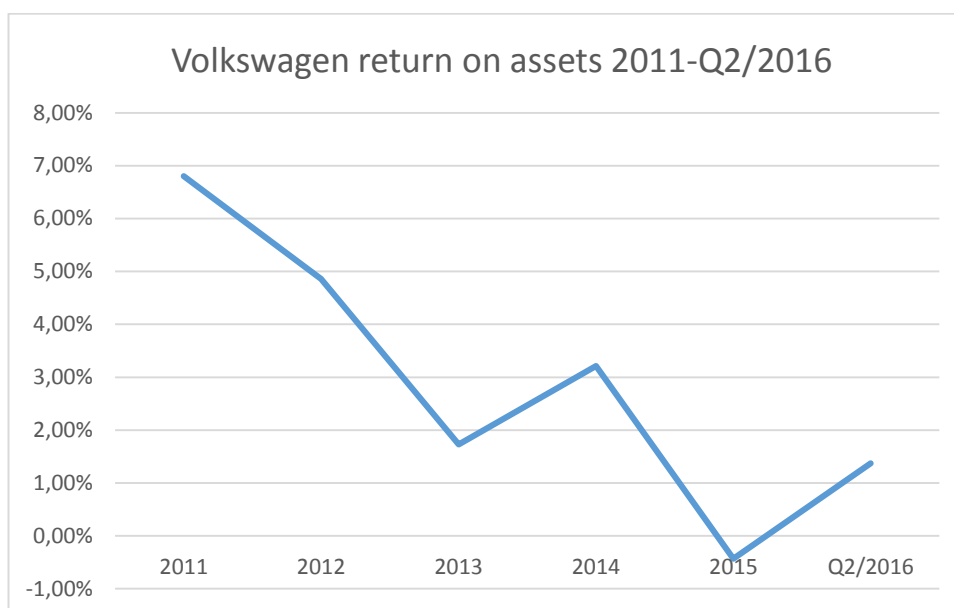
Volkswagen Group's EBIT margin in 2011-2014 has been 9.68 % on average, while in 2015 it was 0.61 %. This is a significant drop and in line with the net profit dropping. By Q2/2016 Volkswagen posted a 4.46 % EBIT, indicating that the company would have recovered from the 2015 slump.

Return on Assets

Table 6. Volkswagen return on assets 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014
0,3 %	-0,43%	3,21 %	1,73 %	4,86 %	6,8 %	4,15 %

Figure 5. Volkswagen return on assets 2011-Q2/2016



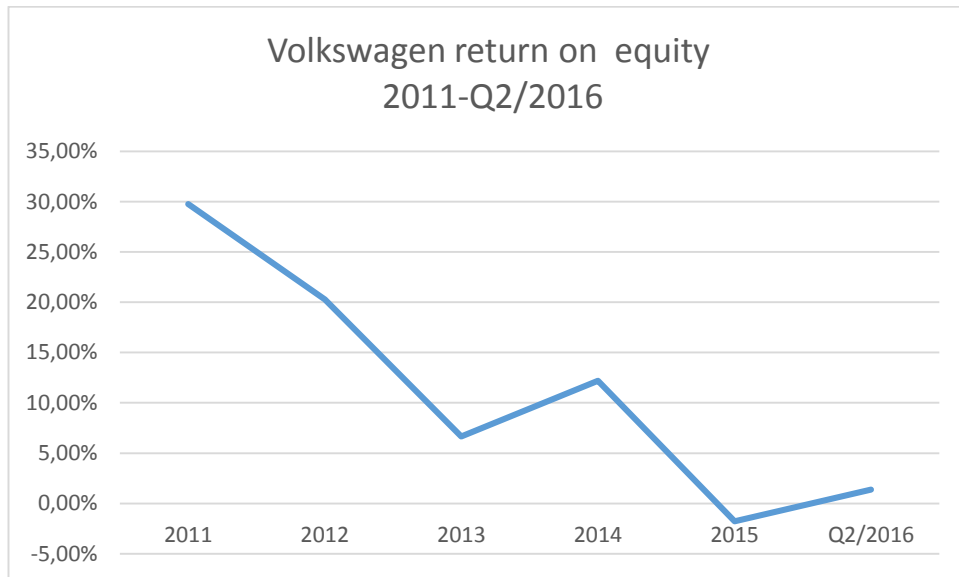
Volkswagen Return on Equity has been on a downward trend throughout the period, falling from 6.8 % in 2011 to -0.43 % in 2015. Judging by Q2/2016, the company is on track to post a positive figure for this year but is still a long way from the 4.15 % average in 2011-2015.

Return on Equity

Table 7. Volkswagen return on equity 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014
1,37 %	-1,78 %	12,21 %	6,65 %	20,29 %	29,77%	17,23 %

Figure 6. Volkswagen return on equity 2011-Q2/2016



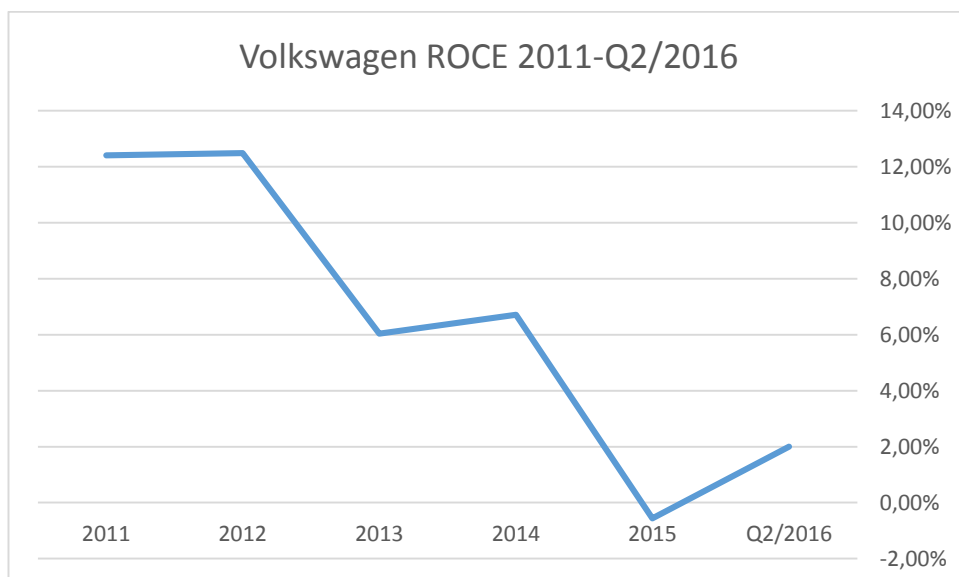
The same downward trend can be seen with ROE as with ROA. Years 2011 and 2012 stand out as the best due to the merger with Porsche. 2015 and Q2/2016 are far from average.

Return on Capital Employed

Table 8. Volkswagen Return on Capital Employed 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014
2,00 %	-0,56 %	6,71 %	6,04 %	12,49 %	12,41 %	9,41 %

Figure 7. Volkswagen ROCE 2011-Q2/2016



In the above table and chart it can be seen that while net profit and EBIT have already recovered by Q2/2016, the ROCE margin still remains drastically below the 2011-2014 average of 9.41 %. This indicates that VW have had to take on more liabilities in order to recover from the losses. In 2014 VW's total assets were 351,209 MEUR and by 2015 they had grown to 381,935 MEUR, an increase of 8.74%, while VW's current liabilities grew from 130,706 MEUR to 148,839 MEUR, an increase of 13.87 %.

Summary

Volkswagen profitability is in a downward trend. Years 2011-2012 stand out as the best and 2015-Q/2016 as the worst.

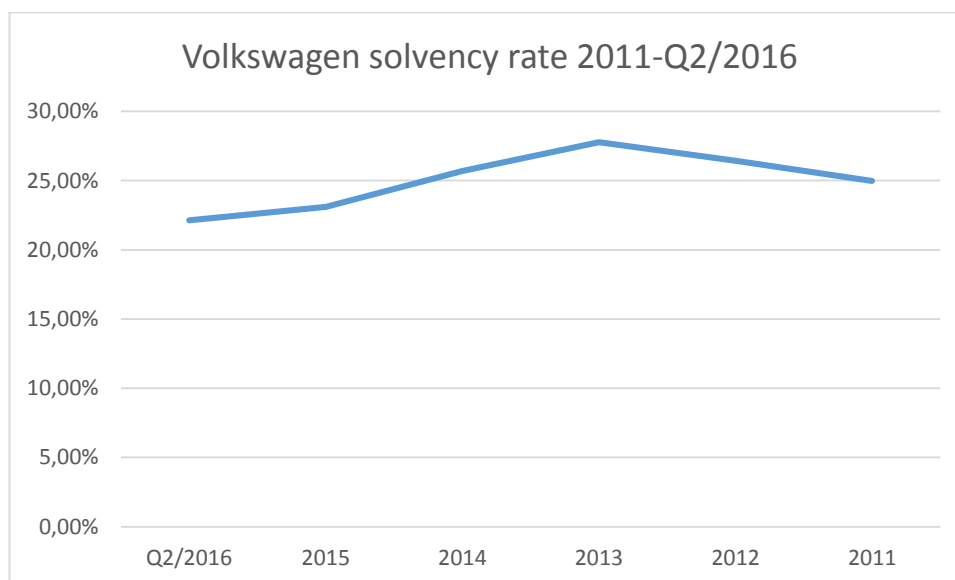
3.1.2 Solvency

Solvency rate

Table 9. Volkswagen Group solvency rate 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014
22,14 %	23,11 %	25,68 %	27,76 %	26,43 %	24,97 %	26,21 %

Figure 8. Volkswagen Group solvency rate 2011-Q2/2016



The above table and chart illustrate VW Group's solvency rate, which means the amount of equity of the balance sheet total. This ratio has remained quite stable in 2011-2014 at around 26 % on average. In 2015 the solvency rate dropped to 23.11 % and by Q2/2016

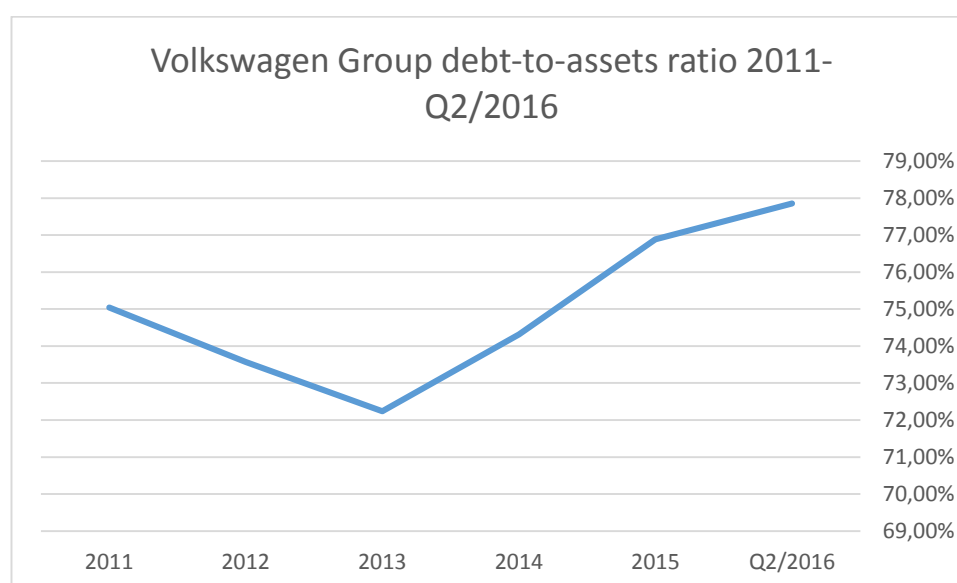
to 22.14 %, this indicates a downward trend which is alarming since the company is taking on more liabilities while its profits are in a decline.

Debt-to-assets ratio

Table 10. Volkswagen Group debt-to-assets ratio 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014
77,86 %	76,89 %	74,32 %	72,24 %	73,57 %	75,04 %	73,79 %

Figure 9. Volkswagen Group debt-to-assets ratio 2011-Q2/2016



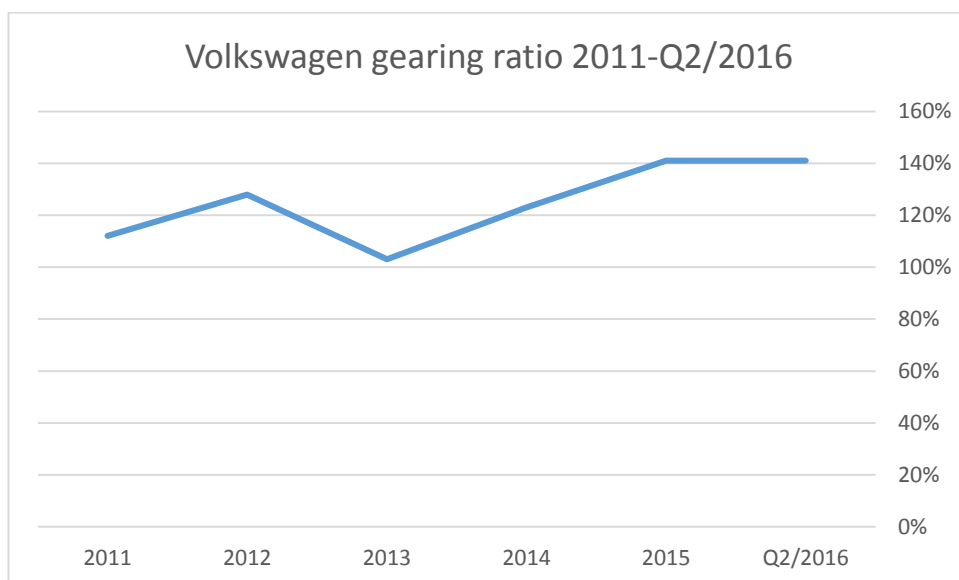
The debt-to-assets ratio mirrors the solvency rate and indicates the percentage of debt in the company's balance sheet total. While the solvency rate is in a decline, when compared to previous years, the debt-to-assets ratio is going up, while the company is taking on more debt in order to finance its operations.

Gearing ratio

Table 11. Volkswagen Group gearing ratio 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014
141 %	141 %	123 %	103 %	128 %	112 %	117 %

Figure 10. Volkswagen Group gearing ratio 2011-Q2/2016



The above table and chart illustrate VW Group's gearing ratio between 2011-Q2/2016. The average in 2011-2014 is 117 %, while in 2015 it jumped to 141 %, indicating that relation between the company's long term liabilities (taking into account cash reserves by deducting them) compared to its equity has worsened.

Summary

Volkswagen solvency has decreased over the period, this combined with downward profits means the company could face problems serving its long-term debts.

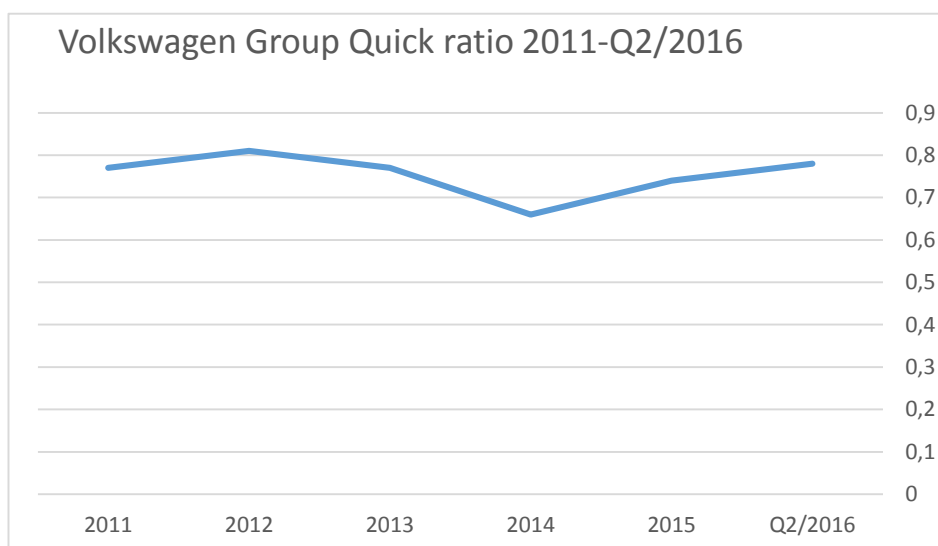
3.1.3 Liquidity

Quick ratio

Table 12. Volkswagen Group quick ratio 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014
0,78	0,74	0,66	0,77	0,81	0,77	0,75

Figure 11. Volkswagen Group quick ratio 2011-Q2/2016



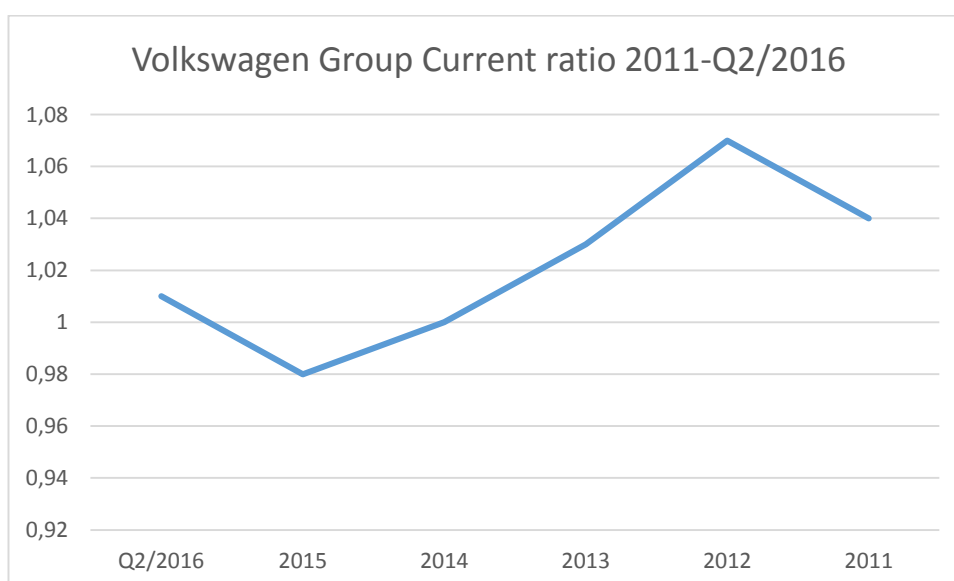
The table above and chart illustrate VW Group's quick ratio during the research period. This ratio has remained quite stable throughout the entire period. Basically the ratio means that in the event that its current liabilities were due immediately, VW could meet around 75 % of them (without considering inventories), which is considered sufficient.

Current ratio

Table 13. Volkswagen Group current ratio 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014
1,01	0,98	1,00	1,03	1,07	1,04	1,04

Figure 12. Volkswagen Group current ratio 2011-Q2/2016



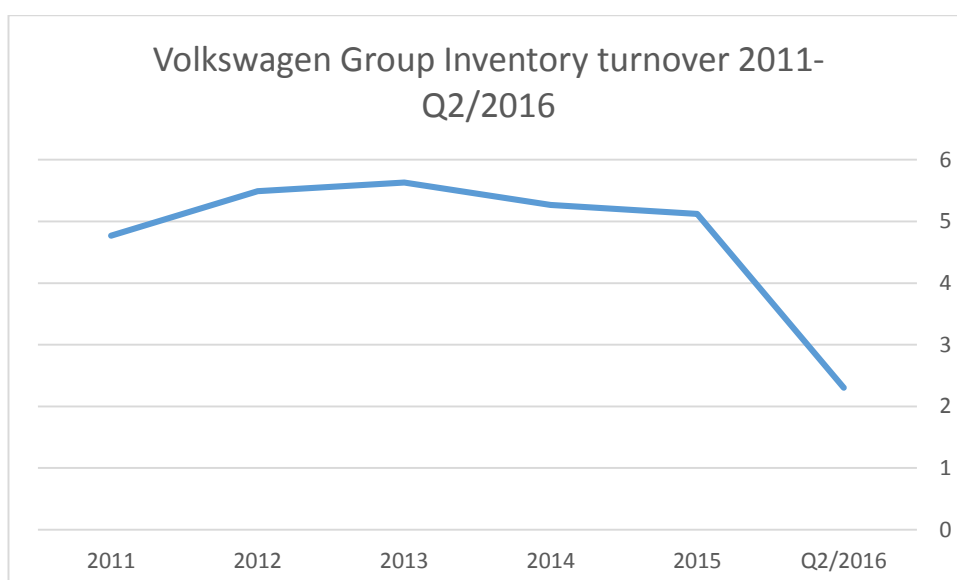
In the above table and chart Volkswagen's current ratio under the period can be seen. This has also remained quite stable, same as the quick ratio. This means that VW is able to meet all of its current liabilities with its current assets (inventories included).

Inventory turnover

Table 14. Volkswagen Group inventory turnover 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014
2,30	5,12	5,27	5,63	5,49	4,77	5,29

Figure 13. Volkswagen Group inventory turnover 2011-Q2/2016



Inventory turnover of Volkswagen as seen in the above table, has remained quite stable throughout the period, selling its inventory 5.25 in a year on average. Comparison with Q2/2016 isn't really valid since it is only half year data but assuming it is constant throughout the year, the company would fall short of 2015.

Summary

Volkswagen liquidity has stayed relatively stable throughout the period and it can service its short-term obligations sufficiently.

3.2 VW performance 2011-Q2/2016 compared to BMW & Daimler

In this sub-chapter VW Group's performance is compared to competitors Daimler Ag and BMW Group.

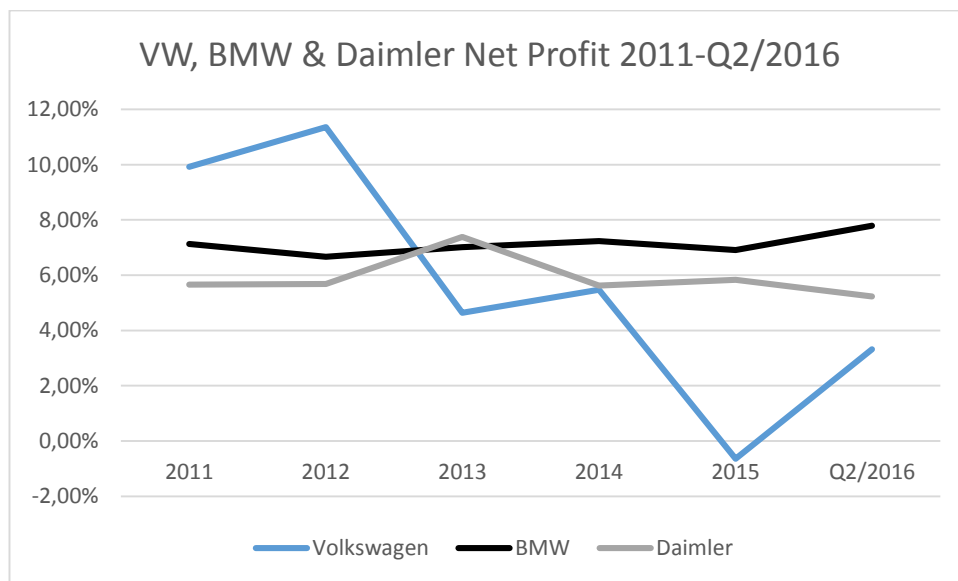
3.2.1 Profitability

Net profit margin

Table 15. VW, BMW & Daimler net profit margin 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014	Company
3,32 %	-0,64 %	5,47 %	4,64 %	11,36 %	9,92 %	7,85 %	VW
7,79 %	6,91 %	7,23 %	7,01 %	6,67 %	7,13 %	7,01 %	BMW
5,23 %	5,83 %	5,62 %	7,39 %	5,68 %	5,66 %	6,09 %	Daimler

Figure 14. VW, BMW & Daimler net profit margin 2011-Q2/2016



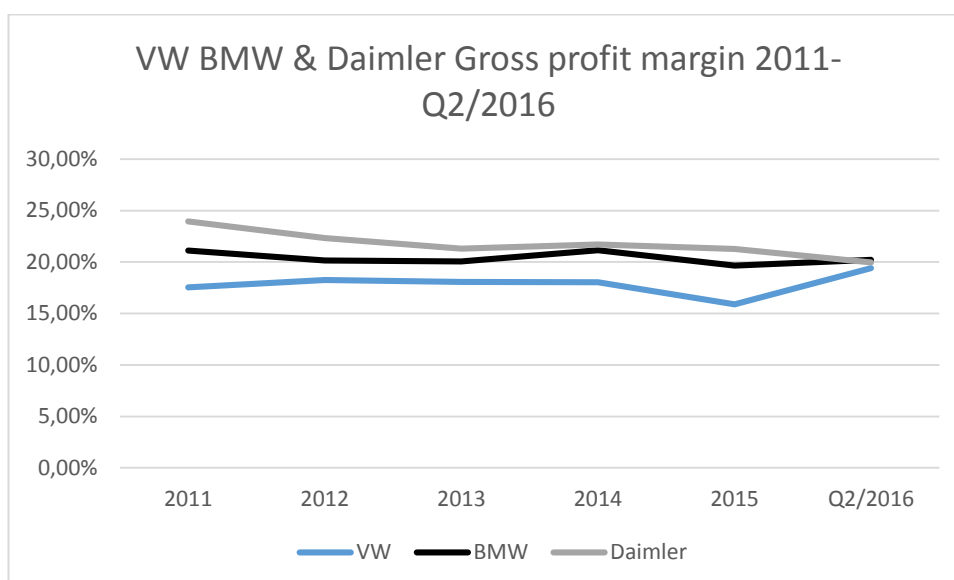
Year 2015 stands out for VW with its negative net profit margin. BMW has had the most stable and highest net profit margin of around 7 % throughout the entire period. Years 2012 and 2011 stand out as the best for VW but has declined since. Daimler is also quite stable hovering around 5-6 %. It seems VW has been able to recover in Q2/2016 while others are quite stable, BMW also increasing slightly.

Gross profit margin

Table 16. VW, BMW & Daimler gross profit margin 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014	Company
19,42 %	15,90 %	18,04 %	18,07 %	18,25 %	17,55 %	17,98 %	VW
20,22 %	19,67 %	21,15 %	20,07 %	20,16 %	21,13 %	20,63 %	BMW
19,97 %	21,27 %	21,70 %	21,30 %	22,32 %	23,95 %	22,32 %	Daimler

Figure 15. VW, BMW & Daimler net profit margin 2011-Q2/2016



For all the companies there was a decrease in gross profit margins from 2014 to 2015, for VW this was the biggest, dropping by 2.14 percentage points. All but Daimler have increased their gross profit margins by Q2/2016, compared to 2015.

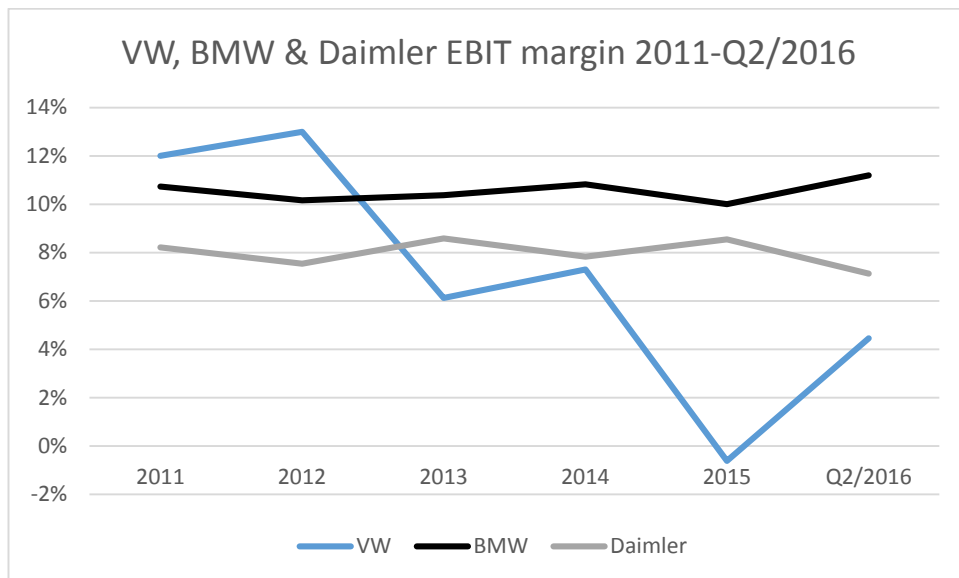
EBIT margin

Table 17. VW, BMW & Daimler EBIT margin 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014	Company
4,46 %	-0,61 %	7,31 %	6,13 %	13 %	12 %	9,68 %	VW
11,19 %	10,01 %	10,83 %	10,38 %	10,17 %	10,73 %	10,53 %	BMW

7,13 %	8,55 %	7,83 %	8,59 %	7,54 %	8,22 %	8,05 %	Daimler
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Figure 16. VW, BMW & Daimler EBIT margin 2011-Q2/2016



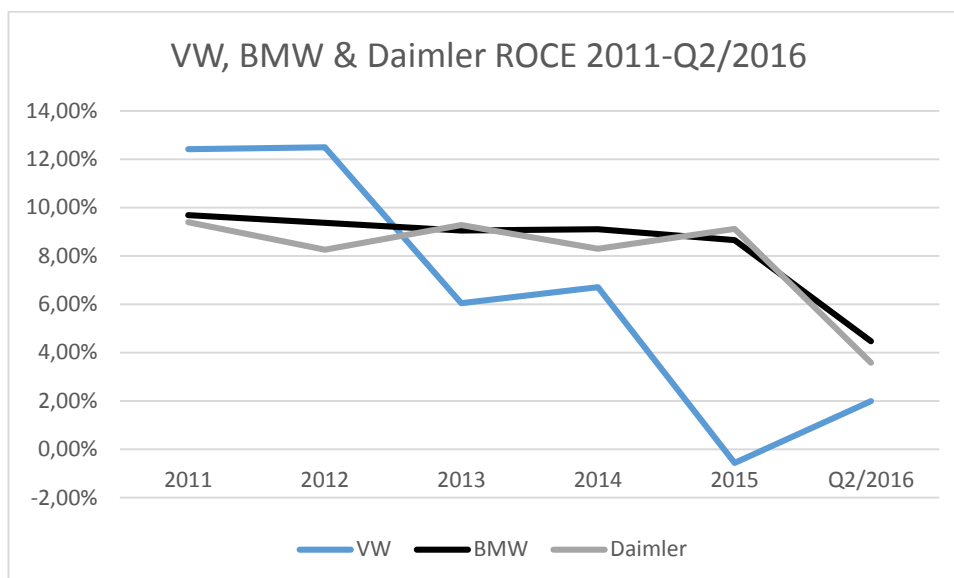
In the above table and graph, VW's negative EBIT margin for 2015 stands out. BMW has continually posted margins above 10 %, Daimler has also been quite stable at around 8 %. In Q2/2016 VW shows signs of recovery but is still behind previous years 2011-2014. For Daimler, 2016 so far has been worse than 2015.

Return on Capital Employed

Table 18. VW, BMW & Daimler ROCE 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014	Company
2,00 %	-0,56 %	6,71 %	6,04 %	12,49 %	12,41 %	9,41 %	VW
4,47 %	8,65 %	9,10 %	9,05 %	9,37 %	9,69 %	9,30 %	BMW
3,58 %	9,12 %	8,29 %	9,27 %	8,26 %	9,39 %	8,80 %	Daimler

Figure 17. VW, BMW & Daimler ROCE 2011-Q2/2016



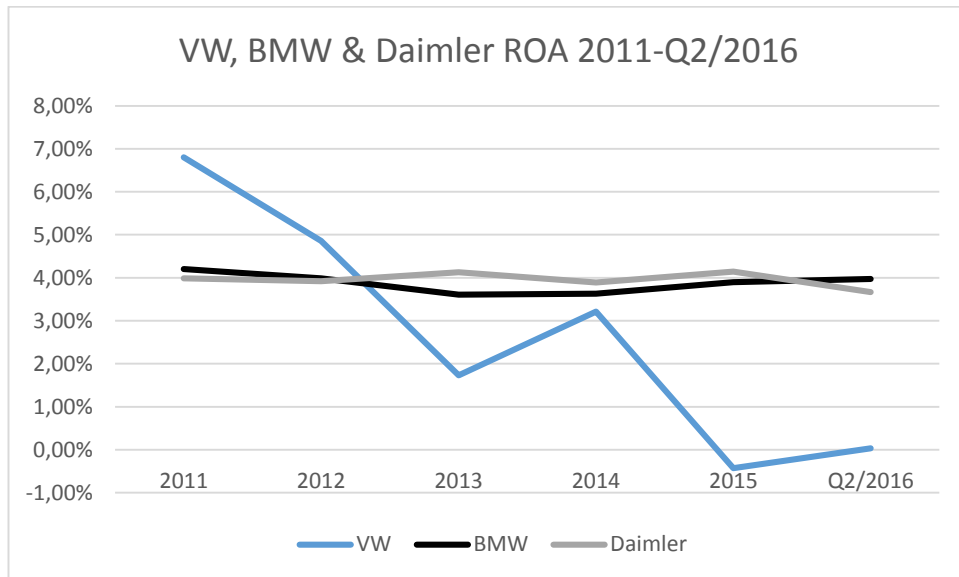
In the table and graph above, VW's negative return on capital employed of -0,56 % for 2015 stands out compared to previous year's 6.71 % and average of 2011-2014 of 9.41 %. Also the fall from 12.49 % to 6.04 % from 2012 to 2013 stands out. For competitors BMW and Daimler, the returns are stable between 8-10 %. According to Q2/2016 figures, VW has recovered since 2015 to post a 2 % ROCE, BMW is slightly ahead of 2015, assuming it generates the same amount of profit in the remaining half year as in the first. Daimler is trailing its 2015 figures.

Return on Assets

Table 19. VW, BMW & Daimler Return on Assets 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014	Company
0,03 %	-0,43 %	3,21 %	1,73 %	4,86 %	6,8 %	4,15 %	VW
3,97 %	3,9 %	3,63 %	3,61 %	3,99 %	4,2 %	3,85 %	BMW
3,67 %	4,14 %	3,89 %	4,13 %	3,92 %	3,99 %	4,04 %	Daimler

Figure 18. VW, BMW & Daimler Return on Assets 2011-Q2/2016



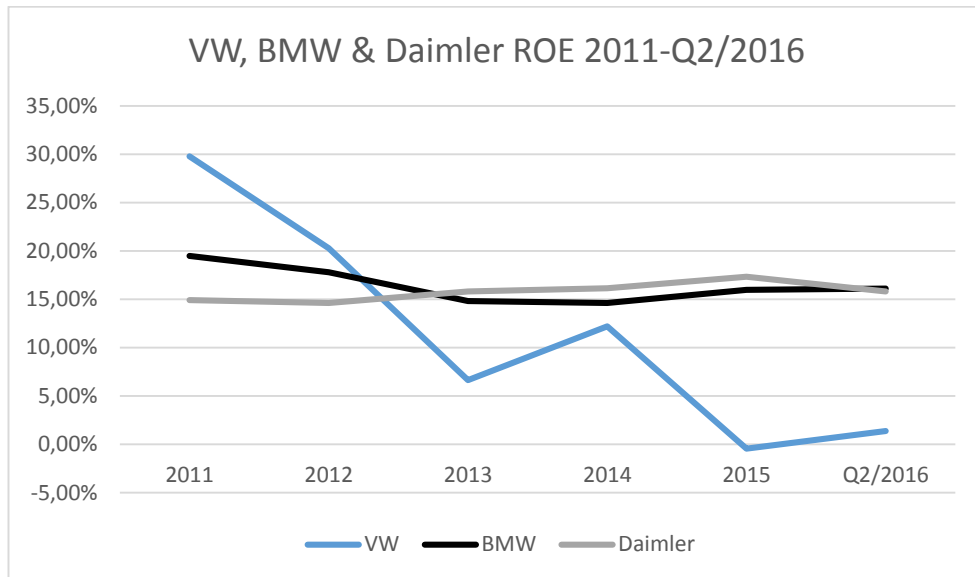
Volkswagen return on assets follows the same downward trend as most of its profitability ratios. The top years for VW were 2011-2012 when it was more profitable than BMW and Daimler, which have stayed very stable throughout the period at around 4 %. This 4 % level is the same as the 2011-2014 average for VW so it seems to be the standard for these three companies. By 2015 and Q2/2016 figures, VW is way off from that “normal” level.

Return on Equity

Table 20. VW, BMW & Daimler Return on Equity 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014	Com-pany
1,37 %	-0,43 %	12,21 %	6,65 %	20,29 %	29,77 %	17,23 %	VW
16,1 %	15,97 %	14,63 %	14,83 %	17,78 %	19,48 %	16,68 %	BMW
15,81 %	17,33 %	16,13	15,81 %	14,61 %	14,91 %	15,36 %	Daimler

Figure 19. VW, BMW & Daimler Return on Equity 2011-Q2/2016



Volkswagen ROE has decreased dramatically from 2011 29.77 % to -0,43% in 2015 while BMW and Daimler have remained stable at around 16-17 %. Q2/2016 doesn't show much promise for Volkswagen.

Summary

Volkswagen's long-term profitability has been as good as its competitors but there is a decreasing trend while BMW and Daimler have been more stable.

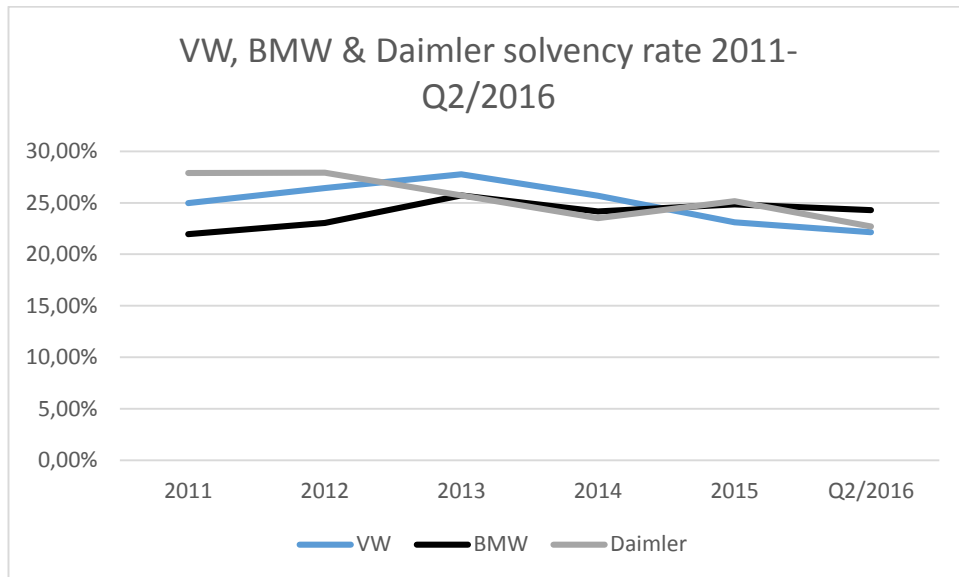
3.2.2 Solvency

Solvency rate

Table 21. VW, BMW & Daimler Solvency rate 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014	Company
22,14 %	23,11 %	25,68 %	27,76 %	26,43 %	24,97 %	26,21 %	VW
24,30 %	24,84 %	24,18 %	25,73 %	23,06 %	21,96 %	23,73 %	BMW
22,72 %	25,15 %	23,51 %	25,73 %	27,92 %	27,91 %	26,27 %	Daimler

Figure 20. VW, BMW & Daimler solvency rate 2011-Q2/2016



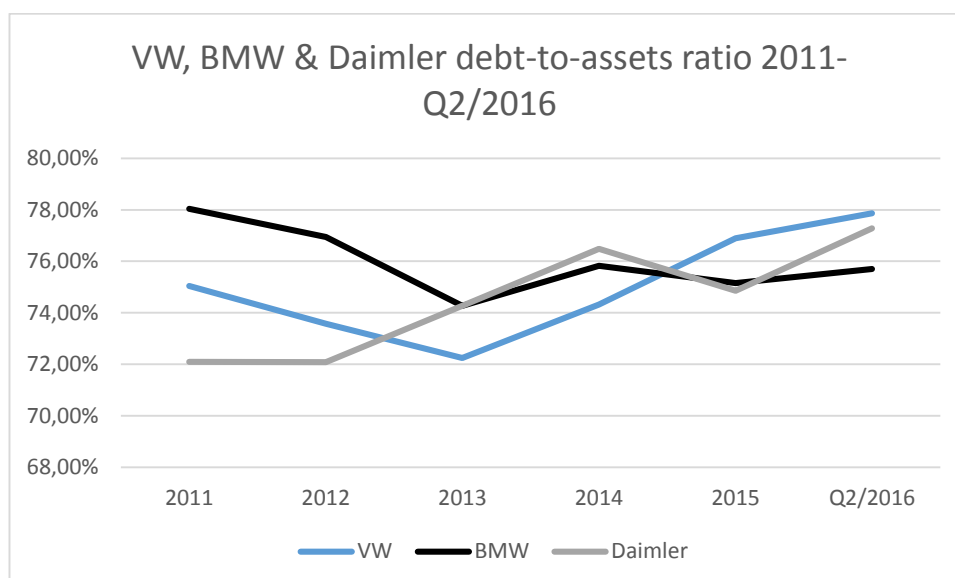
Solvency rates for all companies have been quite stable at between 22-28 %. Overall trend for Daimler and VW is a slight decrease since 2011-2013 to 2014 onward. Overall the solvency rates of these car manufacturers are quite low, only at a sufficient level when compared to the general level of 40 % and the downward trend is worrying for all except BMW, which has strengthened its solvency. This level of solvency appears to be industry specific and is not a problem if profits are stable and the companies can pay back their loans.

Debt-to-assets ratio

Table 22. VW, BMW & Daimler debt-to-assets ratios 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014	Company
77,86 %	76,89 %	74,32 %	72,24 %	73,57 %	75,04 %	73,79 %	VW
75,70 %	75,16 %	75,82 %	74,27 %	76,94 %	78,04 %	76,27 %	BMW
77,28 %	74,85 %	76,49 %	74,27 %	72,08 %	72,09 %	73,73 %	Daimler

Figure 21. Debt-to-assets ratios 2011-Q2/2016



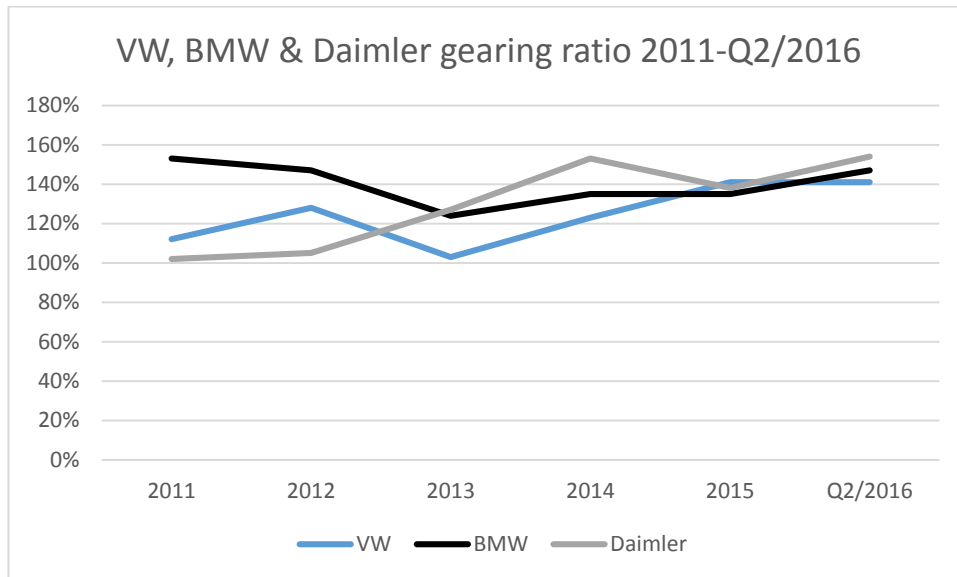
As the debt-to-assets ratio mirrors the solvency rate, the rates have been quite stable for all companies at around 72 to 78 %. The same trend as with the solvency rates applies for the debt-to-assets ratios in that while VW's and Daimler's ratios are on the increase, BMW's is quite stable, decreasing slightly throughout the period.

Gearing ratio

Table 23. VW, BMW & Daimler gearing ratios 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014	Company
141 %	141 %	123 %	103 %	128 %	112 %	117 %	VW
147 %	135 %	135 %	124 %	147 %	153 %	140 %	BMW
154 %	138 %	153 %	127 %	105 %	102 %	122 %	Daimler

Figure 22. VW, BMW & Daimler gearing ratios 2011-Q2/2016



Gearing ratios fluctuate quite significantly between different years and between the companies. All have had gearing ratios of between 100-155 %, which are still considered sufficient. Anything closer to 200 % would be considered alarming. Especially for VW there is an upward trend, increasing from 117 % in 2011 to 141 % in 2015, same goes for Daimler, increasing from 122 % in 2011 to 138 % in 2015. For BMW the trend is downward, decreasing from 153 % in 2011 to 135 % in 2015, however, there is an increase between 2015 (135 %) and Q2/2016 (147 %) for BMW. For Daimler Q2/2016 (154 %) is also worse than 2015 (138 %). For VW, Q2/2016 is stable compared to 2015 at 141 %.

Summary

Volkswagen solvency has been decreasing throughout the period. For all companies solvency rates are only at a sufficient level, which means they could face difficulties in paying their long-term debts if profitability is worse than before.

3.2.3 Liquidity

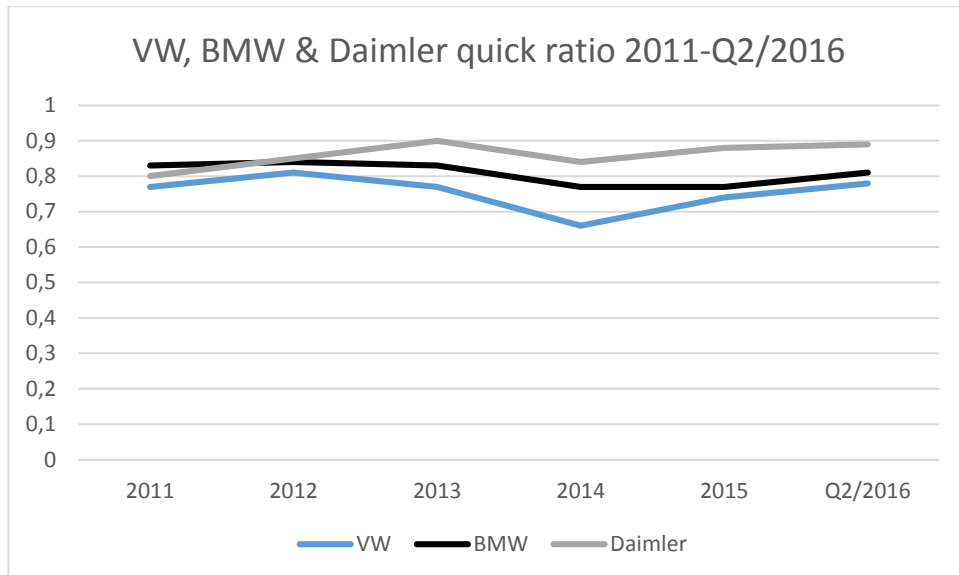
Quick ratio

Table 24. VW, BMW & Daimler quick ratios 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014	Company
0,78	0,74	0,66	0,77	0,81	0,77	0,75	VW

0,81	0,77	0,77	0,83	0,84	0,83	0,82	BMW
0,89	0,88	0,84	0,90	0,85	0,80	0,85	Daimler

Figure 23. VW, BMW & Daimler quick ratios 2011-Q2/2016



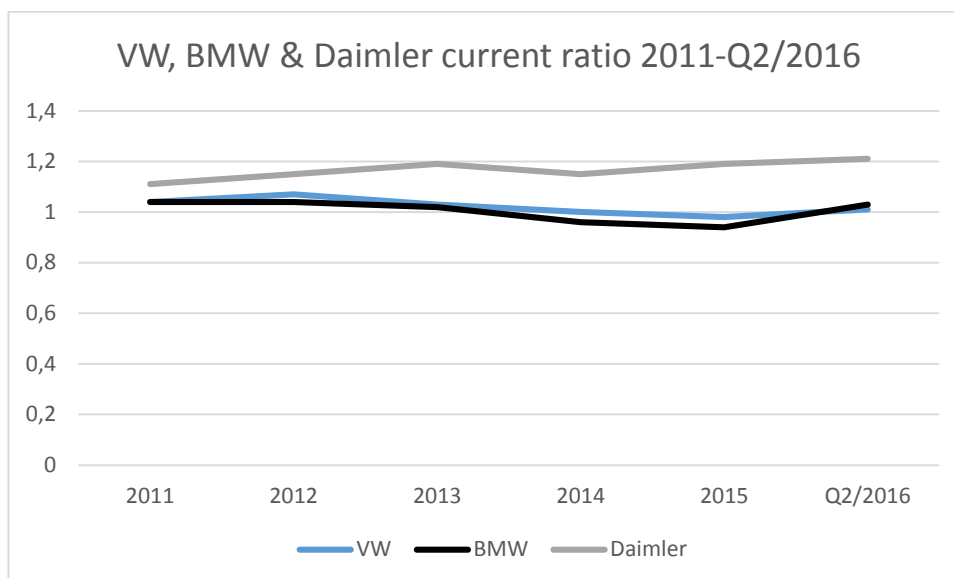
For all companies under the period in question, the quick ratios are between 0.66 and 0.9, which are considered sufficient, anything above 1 would be considered good. This is the most stable ratio for all companies with very little yearly fluctuation. This means that all companies are able to meet on average 76 % of their short term liabilities with their current assets (not including inventories) throughout the entire period.

Current ratio

Table 25. VW, BMW & Daimler current ratios 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014	Company
1,01	0,98	1,00	1,03	1,07	1,04	1,04	VW
1,03	0,94	0,96	1,02	1,04	1,04	1,02	BMW
1,21	1,19	1,15	1,19	1,15	1,11	1,15	Daimler

Figure 24. VW, BMW & Daimler current ratio 2011-Q2/2016



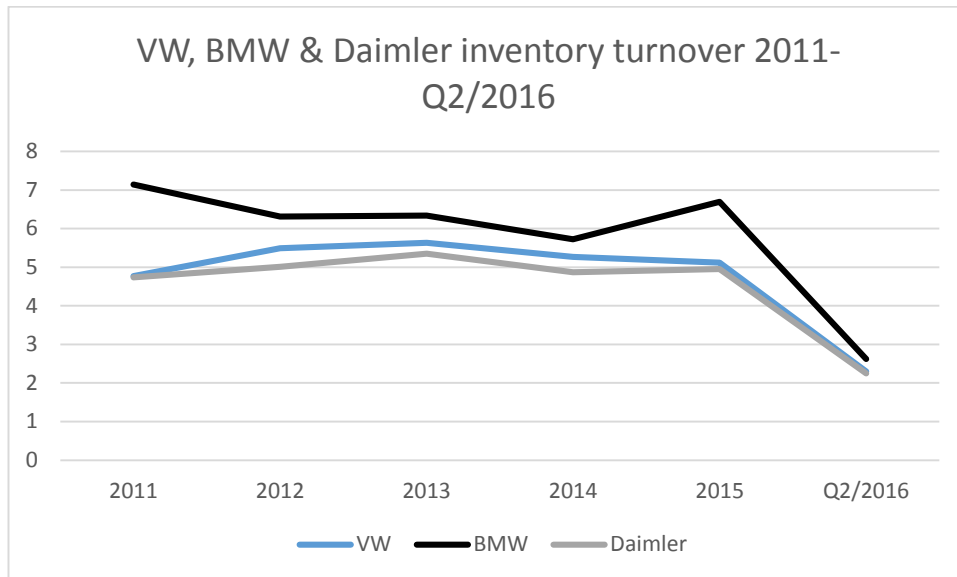
The current ratio also takes into consideration the companies' inventories when assessing their ability to service their short term liabilities. For all companies the figures are between 1 and 1.2 which is considered sufficient and has stayed rather stable throughout the entire period. For Daimler, the ratio is stable at between 1.1-1.2 whereas for BMW and VW current ratios are close to 1.

Inventory turnover

Table 26. VW, BMW & Daimler Inventory turnover 2011-Q2/2016

Q2/2016	2015	2014	2013	2012	2011	2011-2014	Company
2,30	5,12	5,27	5,63	5,49	4,77	5,29	VW
2,62	6,69	5,72	6,34	6,31	7,14	6,38	BMW
2,25	4,95	4,87	5,35	5,01	4,74	4,99	Daimler

Figure 25. VW, BMW & Daimler Inventory turnover 2011-Q2/2016



The inventory turnover ratio reflects the multiplier at which the company sells its entire inventories in a year. For all companies this figure is between 4.74 and 7.14 throughout the period. Volkswagen's inventory turnover seems rather stable at 5.25 on average between 2011-2015. For all companies, the Q2/2016 figure is less than half of the 2015 figure, so it would seem that either the inventory turnover is more rapid toward the end of the year or all companies will fall short of 2015.

Summary

Volkswagen liquidity is generally at a sufficient level along with its competitors.

3.2.4 Investor ratios

P/E ratio

Table 27. VW, BMW & Daimler P/E ratios 2011-2015

2015	2014	2013	2012	2011	2011-2014	Company
-	8,4	10,9	3,7	3,5	6,62	VW
10,1	10,2	10,5	9,4	6,9	9,25	BMW
9,9	10,6	9,8	7,2	6,4	8,5	Daimler

Despite having the lowest average P/E ratio between 2011-2014, no P/E could be calculated for 2015 since VW posted a negative result for that year. The P/E of VW has been growing since 2011-2012, which means a longer time for investors to recoup their money, the 2011 and 2012 profits of Volkswagen were boosted by the acquisition of Porsche. For both BMW and Daimler the P/E ratios have also been growing since 2011-2012.

Dividend yield

Table 28. VW, BMW & Daimler Dividend yields 2011-2015

2015	2014	2013	2012	2011	2011-2014	Company
3,36 %	2,21 %	1,79 %	2,2 %	2,9 %	2,27 %	VW
6,69 %	5,72 %	6,34 %	6,31 %	7,14 %	6,38 %	BMW
4,95 %	4,87 %	5,35 %	5,01 %	4,74 %	4,99 %	Daimler

VW dividend yields are much lower compared to Daimler and BMW. Based on the dividend yields, BMW has been paying the most return to their investors, followed by Daimler. In 2015 seemed to pay a higher dividend than normal but this is only due to the share price dropping so dramatically.

Summary

In terms P/E ratio Volkswagen is a more enticing share for investors compared to its competitors, except for 2015 when the profits were negative. However, the share price has dropped dramatically which means that existing investors have lost value. BMW and Daimler shares have been more stable, although the same increasing trend can be seen.

In terms of dividend yields, Volkswagen has been paying out a lower dividend in relation to share price, compared to its competitors.

3.3 Emissions scandal effect on investor confidence

The one thing that was affected the most by the emissions scandal was the investor confidence in Volkswagen, reflected in the sharp decline of stock price when the information came out on the 18th of September, dropping from 161 euros per share on 18th of September 2015 to 101 euros per share by 2nd of October 2015. The price has since recovered slightly to 131 euros but is still far from the all-time high of 238 euros on 10th of April 2015. (Kresge & Weiss 2015.)

Restoring investor confidence is important for the company for securing future financing in order to grow the business further. Volkswagen has taken measures to ensure this by settling compensation in the United States of America for owners of vehicles implicated in the emissions manipulation scandal. The total compensation amounts to \$15 billion and owners can choose between a buyback or repair and compensation. The US deal also includes donations to environmental protection. In Europe, the owners can take their car to have the devices replaced. (Bomey 2016.)

Some analysts seem confident that the VW stock price will continue to rise in 2016 since its P/E (price to earnings ratio) is at an enticing level of 9.5, whereas the average level in the stock market is 15. The price to earnings ratio means the number of years in which the invested amount to a single share would be earned back by the company in profits per share. (DePersio 2016.)

Volkswagen also announced a program in October 2016 to cut up to 25,000 jobs through employee retirement over the next 10-year period. Analysts agree that this action would bring cost savings up to 2.5 billion euros annually but that further cuts in R&D costs are needed. (Reuters 2016.)

Predicting how the markets will react in the future to announcements of possible new law suits is difficult but it seems that currently in early November 2016 investors are confident that VW will continue to be profitable in the future.

4 Conclusion

In this chapter I will conclude my findings.

4.1 Volkswagen 2015 performance compared to 2011-2014 and Q2/2016

For Volkswagen year 2015 stands out especially in terms of negative profitability, both net profit and EBIT margins were -0.6 %, compared to an average net profit margin of 7.85 % and EBIT margin of 9.85 % in 2011-2014. The decreasing profits in addition to a decreasing solvency rate (24.97 % 2011 and 23.11 % 2015) are the most alarming developments. The same downward trend can also be seen in ROA and ROE.

If profits continue to be lower than before, the company might face problems in servicing its long-term liabilities and securing more financing for future investments. Q2/2016 already shows some promise of recovery, having mostly positive profitability ratios. However, Return On Assets and Return On Equity remain at very low levels compared to long-term performance.

Otherwise the company has been able to increase its turnover and its short-term financial position is at a sufficient level where it can service its short-term liabilities with its current assets. Litigation fees of 7 billion and 5.4 in billion in foreign currency losses were the two biggest contributors to the poor result in 2015. In addition, at least a further 15 billion dollars has to be paid in compensation and fines to US customers and government, which will affect the net profit in 2016.

4.2 Volkswagen 2015 performance compared to BMW and Daimler

When compared to its competitors 2015 for Volkswagen stands out as the worst year in terms of profitability. In the long term VW is as profitable as both Daimler and BMW but there is a decreasing trend, 2011 and 2012 have been the best years for VW in terms of profitability, whereas BMW and Daimler have been performing well throughout 2011-2015.

For all the companies, solvency rates seem relatively low at 22-28 %, compared to the traditional rule of thumb of 40 %, meaning the companies have leveraged their positions quite boldly, trusting that they continue to be profitable. This also indicates that automotive industry requires continuous investments to R&D.

4.3 Measures taken and future outlook

Volkswagen has already taken steps to ensure its future profitability by announcing plans to cut its workforce by 25,000 jobs in the next 10 years through retirement. Restoring investor and consumer confidence are also high on VW's agenda as they have reached agreements with both US and European authorities on how to compensate for the damages done by the emissions scandal. (Reuters 2016.)

Whereas investor confidence has recovered slightly, it appears that consumer confidence remains at a high level according to just announced Q3/2016 figures, which indicate that sales are on the same level as in 2015. There are regional differences in that while in the US sales have declined, Europe is stable and China is growing. (Volkswagen Ag 2016.)

Volkswagen has also announced plans to manufacture 30 more electrical car models by 2025, which is in line with the German opposition party the Green's call to stop manufacturing new petrol or diesel cars in the country by 2030. (Hallam, M. 2016.)

Volkswagen remains profitable judging by its core operations and appears to have been able to limit the damages of the emissions scandal quite well since sales have not been affected. Whether 2016 will be profitable depends mostly on what the total legal fees will amount to.

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Appendices

Appendix 1. Volkswagen Q2/2016 Income Statement

Income Statement

INCOME STATEMENT FOR THE PERIOD APRIL 1 TO JUNE 30

€ million	VOLKSWAGEN GROUP		DIVISIONS			
			AUTOMOTIVE ¹		FINANCIAL SERVICES	
	2016	2015	2016	2015	2016	2015
Sales revenue	56,971	56,041	49,017	48,287	7,954	7,754
Cost of sales	-46,124	-44,652	-39,565	-38,454	-6,559	-6,198
Gross profit	10,847	11,389	9,452	9,832	1,395	1,557
Distribution expenses	-5,647	-5,455	-5,351	-5,144	-295	-311
Administrative expenses	-1,890	-1,811	-1,513	-1,399	-377	-412
Other operating income/expense	-1,412	-631	-1,275	-446	-137	-186
Operating profit	1,899	3,492	1,312	2,844	587	648
Share of profits and losses of equity-accounted investments	601	1,095	585	1,086	16	8
Other financial result	-892	-891	-896	-917	4	26
Financial result	-291	204	-312	170	20	34
Profit before tax	1,607	3,696	1,000	3,014	607	682
Income tax expense	-393	-965	-197	-687	-197	-278
Profit after tax	1,214	2,731	804	2,328	410	404
of which attributable to						
Noncontrolling interests	3	5	0	-1	3	6
Volkswagen AG hybrid capital investors	56	56	56	56	-	-
Volkswagen AG shareholders	1,155	2,671	748	2,273	408	398
Basic earnings per ordinary share (€) ²	2.30	5.33				
Diluted earnings per ordinary share (€) ²	2.30	5.33				
Basic earnings per preferred share (€) ²	2.30	5.33				
Diluted earnings per preferred share (€) ²	2.30	5.33				

1 Including allocation of consolidation adjustments between the Automotive and Financial Services divisions.

2 Explanatory information on earnings per share is presented in note 4. Prior-year figures restated to reflect application of IAS 33.26.

Appendix 2. Volkswagen Income Statement 2014-2015

Income Statement

OF THE VOLKSWAGEN GROUP FOR THE PERIOD JANUARY 1 TO DECEMBER 31, 2015

€ million	Note	2015	2014*
Sales revenue	1	213,292	202,458
Cost of sales	2	-179,382	-165,934
Gross profit		33,911	36,524
Distribution expenses	3	-23,515	-20,292
Administrative expenses	4	-7,197	-6,841
Other operating income	5	12,905	10,298
Other operating expenses	6	-20,171	-6,992
Operating result		-4,069	12,697
Share of profits and losses of equity-accounted investments	7	4,387	3,988
Finance costs	8	-2,393	-2,658
Other financial result	9	773	767
Financial result		2,767	2,097
Earnings before tax		-1,301	14,794
Income tax income/expense	10	-59	-3,726
Current		-2,859	-3,632
Deferred		2,800	-94
Earnings after tax		-1,361	11,068
of which attributable to			
Noncontrolling interests		10	84
Volkswagen AG hybrid capital investors		212	138
Volkswagen AG shareholders		-1,582	10,847
Basic earnings per ordinary share in €	11	-3.20	21.82
Diluted earnings per ordinary share in €	11	-3.20	21.82
Basic earnings per preferred share in €	11	-3.09	21.88
Diluted earnings per preferred share in €	11	-3.09	21.88

* Earnings per share adjusted to reflect application of IAS 33.26.

Appendix 3. Volkswagen Income Statement 2013-2014

Income Statement

OF THE VOLKSWAGEN GROUP FOR THE PERIOD JANUARY 1 TO DECEMBER 31, 2014

€ million	Note	2014	2013*
Sales revenue	1	202,458	197,007
Cost of sales	2	-165,934	-161,407
Gross profit		36,524	35,600
Distribution expenses	3	-20,292	-19,655
Administrative expenses	4	-6,841	-6,888
Other operating income	5	10,298	9,956
Other operating expenses	6	-6,992	-7,343
Operating profit		12,697	11,671
Share of profits and losses of equity-accounted investments	7	3,988	3,588
Finance costs	8	-2,658	-2,366
Other financial result	9	767	-465
Financial result		2,097	757
Profit before tax		14,794	12,428
Income tax income/expense	10	-3,726	-3,283
Current		-3,632	-3,733
Deferred		-94	449
Profit after tax		11,068	9,145
of which attributable to			
Noncontrolling interests		84	52
Volkswagen AG hybrid capital investors		138	27
Volkswagen AG shareholders		10,847	9,066
Basic earnings per ordinary share in €	11	21.84	18.61
Diluted earnings per ordinary share in €	11	21.84	18.61
Basic earnings per preferred share in €	11	21.90	18.67
Diluted earnings per preferred share in €	11	21.90	18.67

* Earnings per share adjusted to reflect application of IAS 33.26.

Appendix 4. Volkswagen Income Statement 2011-2012

Income Statement

« »

of the Volkswagen Group for the Period January 1 to December 31, 2012

 Download

€ million	Note	2012	2011
Sales revenue	1	192,676	159,337
Cost of sales	2	-157,518	-131,371
Gross profit		35,158	27,965
Distribution expenses	3	-18,850	-14,582
Administrative expenses	4	-6,223	-4,384
Other operating income	5	10,496	9,727
Other operating expenses	6	-9,070	-7,456
Operating profit		11,510	11,271
Share of profits and losses of equity-accounted investments	7	13,568	2,174
Finance costs	8	-2,552	-2,047
Other financial result	9	2,967	7,528
Financial result		13,982	7,655
Profit before tax		25,492	18,926
Income tax income/expense	10	-3,608	-3,126
current		-4,196	-4,351
deferred		588	1,225
Profit after tax		21,884	15,799
Noncontrolling interests		168	391
Profit attributable to shareholders of Volkswagen AG		21,717	15,409
Basic earnings per ordinary share in €	11	46.42	33.10
Diluted earnings per ordinary share in €	11	46.42	33.10
Basic earnings per preferred share in €	11	46.48	33.16
Diluted earnings per preferred share in €	11	46.48	33.16

Appendix 5. Balance Sheet of Volkswagen 2015-2014

CONSOLIDATED FINANCIAL STATEMENTS
Balance Sheet

Balance Sheet

OF THE VOLKSWAGEN GROUP AS OF DECEMBER 31, 2015

€ million	Note	Dec. 31, 2015	Dec. 31, 2014
Assets			
Noncurrent assets			
Intangible assets	12	61,147	59,935
Property, plant and equipment	13	50,171	46,169
Lease assets	14	33,173	27,585
Investment property	14	504	485
Equity-accounted investments	15	10,904	9,874
Other equity investments	15	974	3,683
Financial services receivables	16	63,185	57,877
Other financial assets	17	6,730	6,498
Other receivables	18	1,340	1,654
Tax receivables	19	395	468
Deferred tax assets	19	8,026	5,878
		236,548	220,106
Current assets			
Inventories	20	35,048	31,466
Trade receivables	21	11,132	11,472
Financial services receivables	16	46,888	44,398
Other financial assets	17	10,043	7,693
Other receivables	18	5,367	5,080
Tax receivables	19	1,029	1,010
Marketable securities	22	15,007	10,861
Cash, cash equivalents and time deposits	23	20,871	19,123
		145,387	131,102
Total assets		381,935	351,209

€ million	Note	Dec. 31, 2015	Dec. 31, 2014
Equity and Liabilities			
Equity	24		
Subscribed capital		1,283	1,218
Capital reserves		14,551	14,616
Retained earnings		69,039	71,197
Other reserves		-4,374	-2,081
Equity attributable to Volkswagen AG hybrid capital investors		7,560	5,041
Equity attributable to Volkswagen AG shareholders and hybrid capital investors		88,060	89,991
Noncontrolling interests		210	198
		88,270	90,189
Noncurrent liabilities			
Financial liabilities	25	73,292	68,416
Other financial liabilities	26	5,901	3,954
Other liabilities	27	4,905	4,238
Deferred tax liabilities	28	4,433	4,774
Provisions for pensions	29	27,535	29,806
Provisions for taxes	28	3,940	3,215
Other provisions	30	25,170	15,910
		145,175	130,314
Current liabilities			
Put options and compensation rights granted to noncontrolling interest shareholders	31	3,933	3,703
Financial liabilities	25	72,313	65,564
Trade payables	32	20,460	19,530
Tax payables	28	330	256
Other financial liabilities	26	10,350	7,643
Other liabilities	27	14,014	14,143
Provisions for taxes	28	1,301	2,791
Other provisions	30	25,788	17,075
		148,489	130,706
Total equity and liabilities		381,935	351,209

Appendix 6. Volkswagen Balance Sheet Q2/2016

BALANCE SHEET AS OF JUNE 30, 2016 AND DECEMBER 31, 2015

€ million	VOLKSWAGEN GROUP		DIVISIONS			
	2016	2015	AUTOMOTIVE*		FINANCIAL SERVICES	
			2016	2015	2016	2015
Assets						
Noncurrent assets	238,320	236,548	130,210	132,812	108,110	103,736
Intangible assets	61,483	61,147	61,262	60,918	220	228
Property, plant and equipment	50,364	50,171	47,916	47,768	2,448	2,403
Lease assets	35,210	33,173	3,099	2,931	32,111	30,242
Financial services receivables	65,132	63,185	9	–	65,123	63,185
Investments, equity-accounted investments and other equity investments, other receivables and financial assets	26,132	28,873	17,924	21,195	8,207	7,678
Current assets	163,109	145,387	90,622	74,019	72,487	71,367
Inventories	37,716	35,048	33,739	31,369	3,977	3,679
Financial services receivables	47,805	46,888	–678	–614	48,482	47,502
Other receivables and financial assets	32,646	27,572	20,842	15,315	11,804	12,257
Marketable securities	15,252	15,007	12,486	12,261	2,766	2,747
Cash, cash equivalents and time deposits	29,691	20,871	24,233	15,688	5,457	5,183
Total assets	401,429	381,935	220,832	206,831	180,597	175,103
Equity and Liabilities						
Equity	88,890	88,270	66,947	67,366	21,943	20,905
Equity attributable to Volkswagen AG shareholders	81,156	80,500	59,546	59,898	21,610	20,603
Equity attributable to Volkswagen AG hybrid capital investors	7,519	7,560	7,519	7,560	–	–
Equity attributable to Volkswagen AG shareholders and hybrid capital investors	88,675	88,060	67,065	67,458	21,610	20,603
Noncontrolling interests	215	210	–118	–92	333	302
Noncurrent liabilities	151,713	145,175	79,201	73,568	72,512	71,607
Financial liabilities	70,499	73,292	6,468	9,557	64,031	63,735
Provisions for pensions	35,247	27,535	34,692	27,119	555	415
Other liabilities	45,967	44,349	38,041	36,892	7,926	7,457
Current liabilities	160,826	148,489	74,684	65,898	86,142	82,591
Put options and compensation rights granted to noncontrolling interest shareholders	3,689	3,933	3,689	3,933	–	–
Financial liabilities	81,706	72,313	2,316	–3,974	79,390	76,286
Trade payables	21,811	20,460	19,559	18,709	2,252	1,751
Other liabilities	53,621	51,783	49,121	47,229	4,499	4,554
Total equity and liabilities	401,429	381,935	220,832	206,831	180,597	175,103

* Including allocation of consolidation adjustments between the Automotive and Financial Services divisions, primarily intragroup loans.

Appendix 7. Volkswagen Balance Sheet 2013-2014

Balance Sheet

OF THE VOLKSWAGEN GROUP AS OF DECEMBER 31, 2014



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€ million	Note	Dec. 31, 2014	Dec. 31, 2013
Assets			
Noncurrent assets			
Intangible assets	12	50,935	50,243
Property, plant and equipment	13	46,169	42,389
Lease assets	14	27,585	22,259
Investment property	14	485	427
Equity-accounted investments	15	9,874	7,934
Other equity investments	15	3,683	3,941
Financial services receivables	16	57,877	51,198
Other financial assets	17	6,498	7,040
Other receivables	18	1,654	1,456
Tax receivables	19	468	633
Deferred tax assets	19	5,878	5,622
		220,106	202,141
Current assets			
Inventories	20	31,466	28,653
Trade receivables	21	11,472	11,133
Financial services receivables	16	44,398	38,386
Other financial assets	17	7,693	6,501
Other receivables	18	5,080	5,030
Tax receivables	19	1,010	729
Marketable securities	22	10,861	8,492
Cash, cash equivalents and time deposits	23	19,123	23,178
		131,102	122,192
Total assets		351,209	324,333
Equity and Liabilities			
Equity			
24			
Subscribed capital		1,218	1,191
Capital reserves		14,616	12,658
Retained earnings		71,197	72,341
Other reserves		-2,081	-459
Equity attributable to Volkswagen AG hybrid capital investors		5,041	2,004
Equity attributable to Volkswagen AG shareholders and hybrid capital investors		89,991	87,733
Noncontrolling interests		198	2,304
		90,189	90,037
Noncurrent liabilities			
Financial liabilities	25	68,416	61,517
Other financial liabilities	26	3,954	2,305
Other liabilities	27	4,238	4,527
Deferred tax liabilities	28	4,774	7,894
Provisions for pensions	29	29,806	21,774
Provisions for taxes	28	3,215	3,674
Other provisions	30	15,910	13,981
		130,314	115,672
Current liabilities			
Put options and compensation rights granted to noncontrolling interest shareholders	31	3,703	3,638
Financial liabilities	25	65,564	59,987
Trade payables	32	19,530	18,024
Tax payables	28	256	218
Other financial liabilities	26	7,643	4,526
Other liabilities	27	14,143	11,004
Provisions for taxes	28	1,791	2,869
Other provisions	30	17,075	18,360
		130,708	118,625
Total equity and liabilities		351,209	324,333

Appendix 8. Volkswagen Balance Sheet 2011-2012

Balance Sheet

of the Volkswagen Group as of December 31, 2012



[Download](#)

C million	Note	Dec. 31, 2012	Dec. 31, 2011
Assets			
Noncurrent assets			
Intangible assets*	12	59,158	22,176
Property, plant and equipment*	13	39,424	31,876
Leasing and rental assets	14	20,034	16,626
Investment property	14	433	340
Equity-accounted investments	15	7,309	10,249
Other equity investments	15	3,870	3,049
Financial services receivables	16	49,785	42,450
Other financial assets	17	6,431	12,823
Other receivables	18	1,671	1,582
Noncurrent tax receivables	19	552	627
Deferred tax assets	19	7,915	6,333
		196,582	148,129
Current assets			
Inventories	20	28,674	27,551
Trade receivables	21	10,099	10,479
Financial services receivables	16	36,911	33,754
Other financial assets	17	5,872	4,253
Other receivables	18	4,823	4,543
Current tax receivables	19	761	623
Marketable securities	22	7,433	6,146
Cash, cash equivalents and time deposits	23	18,488	18,291
		113,061	105,640
Total assets*		309,644	253,769
Equity and Liabilities			
Equity	24		
Subscribed capital		1,191	1,191
Capital reserves		11,509	9,329
Accumulated comprehensive income		64,815	47,019
Equity attributable to shareholders of Volkswagen AG		77,515	57,539
Noncontrolling interests		4,310	5,815
		81,825	63,354
Noncurrent liabilities			
Noncurrent financial liabilities*	25	63,603	44,442
Other noncurrent financial liabilities	26	2,397	2,547
Other noncurrent liabilities	27	4,675	4,394
Deferred tax liabilities*	28	9,050	4,055
Provisions for pensions	29	23,969	16,787
Provisions for taxes	28	4,239	3,721
Other noncurrent provisions*	30	14,373	13,235
		122,306	89,179
Current liabilities			
Current financial liabilities	25	54,060	49,090
Trade payables	31	17,268	16,325
Current tax payables	28	238	844
Other current financial liabilities	26	4,425	4,888
Other current liabilities*	27	11,111	11,196
Provisions for taxes	28	1,721	2,888
Other current provisions*	30	16,689	16,005
		105,513	101,237
Total equity and liabilities*		309,644	253,769

* Prior-period figures adjusted because of the updated purchase price allocation in conjunction with the acquisition of MAN.