How the "Go Green" trend influences the automotive industry financial performance

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ABSTRACT

With "Go Green" becoming a trend for many industries, investors are more aware of how the daily operations of companies have become more responsible. With increased stakeholder attention to Corporate Social Responsibility, several scholars, including the author of this paper, initiated research on how Corporate Social Responsibility will influence companies' financial performance. Will CSR be just be a name for more operating expenses or will it help companies outperform the market and add value to investors? The author's previous research found that there is a positive relationship between Corporate Social Responsibility and many firms' financial performance.

In this paper, the authors chose the automotive industry to dig deeper into how this sustainable trend influenced companies' financial performance especially when the fully electric Tesla became one of the hottest companies in recent years. The authors chose five American consumer goods companies and ten automakers around the world to examine their five years financial performance using ROE, stock return, and profitability ratio. Besides comparing these companies with the S&P 500, the authors also used Tesla as a leader for this new "Go Green" trend for the automotive industry and examined how this will influence automakers' financial performance.

Keywords: Corporate Social Responsibility, Automotive, Go Green, Tesla, Financial

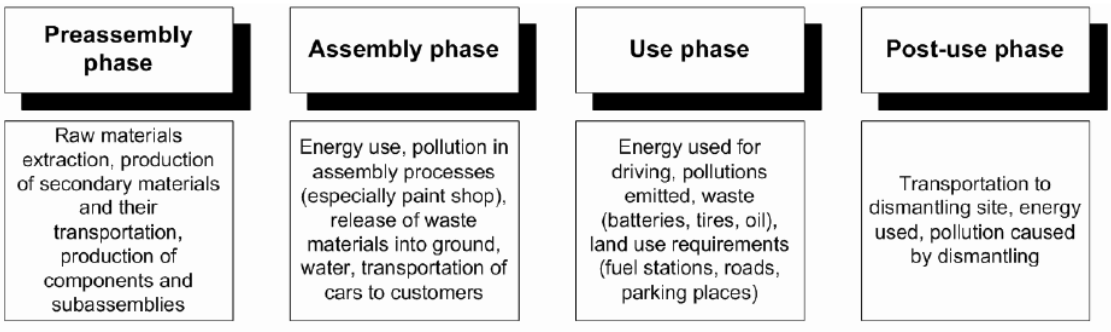
PRIOR WORK

With the development of modern society, people have become more aware of the scarcity of resources. Corporations have been facing higher standards for their performance. Profit has become only one element of measurement for the success of modern corporations. Upper management now has the challenge to satisfy not only shareholders' interest but also the interest of all stakeholders'. As mentioned in Ron Robins' research, the majority of executives believed Corporate Social Responsibility (CSR) could improve profit and the last thing they would do was avoid engaging in CSR. (Robins, 2011) Social responsibility has become a hot trend for every firm, especially public firms. From a voluntary initiative to a mandatory requirement, there is a clear trend of rising interest in CSR disclosure of companies who face the pressure to demonstrate that they are responsible citizens. (White, 2012) Many scholars have become dedicated to research on the relationship between CSR and the corporations' performance. Although the results varied, there is a clear tendency of social attention in this area and increasing evidence to support the positive correlation between CSR and financial performance.

Starting in 2008, the author initiated several research projects on how corporate sustainability may affect financial performance. The earliest data for this project is from 2003. The first several research projects focused on how environmentally friendly companies performed compared to the market. The focus turned to whether CSR leaders performed better when the economy turned down. It was learned that from 2007 to 2011, even when the financial crisis crushed the stock market, "the stock price of DJSI companies increased 12.69% on average, while the S&P 500 dropped 15%" (Author, 2012). As the research went on, the author's team turned their attention from a general market performance to industry performance. They tried to "identify characteristics of superior financial performance during and after a recession." (Author, 2013) When they narrowed their research to compare the performance on an industry basis, they noticed that certain industries outperformed others in the market. According to the research, "corporations dealing mainly with consumer goods performed quite well in both stock price returns and average increases in Return on Equity (ROE)." (Author, 2013). Based on the previous research, the author's team decided to develop this new methodology to see how this sustainability trend influenced one particular industry, namely automotive.

The automotive industry has always been criticized for its negative influence on the environment and its role in global warming. On an economic note however, the automotive industry accounts for about 2%-3% of national GDP in several countries like the US and China. Since fuel efficiency of cars is highly related to CO2 emissions, carmakers have experienced risk coming from increasing oil prices and government regulations of CO2 emissions. Not only has the EU published policies on cars and CO2 emissions, other countries, like Japan and US, are also concerned about CO2 emissions of cars. According to Bastiaan Rogmans' research, fuel efficient car producers had a superior position in the market, especially when the economy was suffering. However, companies like General Motors, Chrysler and Ford, who primarily made fuel inefficient cars in the US market, suffered in terms of financial performance. Also, when the government turned towards stricter CO2 emissions regulations, lower fuel efficiency carmakers suffered more than their fuel-efficient peers. (Rogmans, 2009)

Besides CO2 emissions from the use of cars, the whole supply chain of cars has a huge impact on the environment, including every phase from preassembly to post-use.



(André Martinuzzi, 2011)

Several automobile makers initiated various green operation innovations focusing on using green supply chain management techniques that look to solve CSR issues the automotive industry is facing. Since many "green operations practices such as green buildings, eco-design, green supply chains, green manufacturing, reverse logistics, and innovation" of alternative fuel solution for cars, had been pursued by carmakers, they have also benefited from this hard pursuit of CSR. (André Martinuzzi, 2011)

CORPORATE SOCIAL RESPONSIBILITY

Although the term CSR has been popular since the 1960s and has gained increasing attention among academics and the business world, there are many names and definitions encompassed with it, like "corporate conscience, corporate citizenship, social performance, or sustainable responsible business / Responsible Business" ,Corporate social responsibility, or "People Planet Profits, triple bottom line" (Author, 2013), or corporate social performance. Within all these different terms, it is generally agreed that CSR is one rising element of corporate strategy which takes all the related parties, employees, environment, communities, suppliers, and consumers, in consideration and guides companies to initiate activities investing in social, environmental, and ethical issues. Wikipedia defined CSR as a "self-regulating mechanism whereby a business monitors and ensures its active compliance with the spirit of the law, ethical standards, and international norms". Under internal and external pressures, companies have been maintaining or expanding their CSR budgets to implement their CSR activities, ranging from Intel's education and development programs in countries such as Afghanistan, Cambodia, Haiti and Uganda, General Electric's charitable donations and investment in environmentally friendly practices and products ('Surprising survivors: corporate do-gooders', Fortune, January 20, 2009), Pfizer's supply of free name-brand drugs to newly unemployed customers ('Why doing good is good for business', Fortune, February 2, 2010), to Starbucks' offering of health-care benefits and stock to even part-time employees and promotion of sound environmental practices by forging partnerships with coffee growers ('How UPS, Starbucks, Disney do good', Fortune, February 25, 2006)." (Jong-Seo Choi, 2010). CSR activities not only improve the efficiency of companies' internal operation by reducing waste and cost, motivating employees, stimulating product innovation but also attract external investors by building good brand image, mitigating potential operational risk, and engaging stakeholders.

TREND OF AUTOMOTIVE:

Go Green and Sustainable Development

According to IBISWorld, increasing gasoline prices and consumers' awareness of environmental issues has reshaped consumers' preferences from "fuel-guzzling pickup trucks to smaller, more fuel-efficient cars". (IBISWorld, 2013) Some automakers like Toyota which strategically expanded its production lines to more hybrid and fuel-efficient cars enjoyed the benefit of shifting while other automakers, like The Big Three American automakers, (GM, Ford and Chrysler), who stuck with fuel-inefficient pickup trucks and SUVs suffered from the failure of meeting the trend. "Consequently, Chrysler filed for bankruptcy protection in May 2009 after months of unsuccessful attempts at restructuring, and GM filed for bankruptcy protection a month later." (IBISWorld, 2013)

The incentive of skyrocketing fuel prices, government regulations of CO2 emissions and social responsibility of automakers also stimulate purchases of hybrid electric, environmentally friendly vehicles which cost less in fuel consumption and lower CO2 emissions than standard cars. Moreover, several governments not only restricted CO2 emissions for cars but also introduced policies, like "tax reduction, low-interest rate financing, and cash rebates" to promote "the development and manufacture of fuel-efficient vehicles". (IBISWorld, 2013)

Based on the shift of consumers and government incentives for fuel economy solutions, "alternative fuel vehicles (AFV)" (Mokhtarian, 2004) attracted the attention of automotive manufacturers to spend their R&D resources in technology innovation to achieve the goal of increasing fuel efficiency and reducing greenhouse gas emissions. "Hybrid electric vehicle (HEV) technology" (Nations Environment Programme (UNEP),Nairobi, Kenya , 2009) which was introduced to the North American market in the mid-1990's, became the hot topic and gained a huge market growth in the recent ten years. In the US "hybrid cars are capturing an increasing share of the domestic automobile market, rising from 0.4% of all retail sales in May 2004 to 3.4% in May 2007." (Garth Heutel, 2009) It has been predicted by the United Nations Environment Program that the HEVs will grow to an increasing scale in the next five to ten years in the developing countries. (Nations Environment Programme (UNEP), Nairobi, Kenya, 2009)

The world oil price and greenhouse gas emission encourage more and more customers to move to alternative fuel solutions in the automobile industry and the growth of hybrid vehicles sales confirm the trend of the automobile industry going greener. (Lamberson, 2009)

Tesla's Example

With the boom of hybrid vehicles, more and more electric plug-in infrastructures have been built or integrated into original gas stations. And the demand for full electric cars increased also. The success of Tesla Motor confirmed the rising attention to full electric cars not only in North America but all over the world. The first fully electric model of the Tesla car hit the streets in 2008 and only four years after the first launch more than 2,300 emission-free Tesla Roadsters with the price around $70,000 were sold in over 37 countries. (Tesla Release 2013) Moreover, Tesla is not only a rising star in the fuel efficient area, but also affirmed by the National Highway Traffic Safety Administration (NHTSA) to be "the 5-star safety rating in all categories for model year 2014", " the highest safety rating in America." (Tesla Release, 2013)

Initiated from 2012, Tesla established supercharger stations in California and accelerated energizing supercharger networks worldwide. Through January 2014, "80 Supercharger locations are energized worldwide, with 14 locations in Europe. More than 11 million kilometers have been charged by Tesla Superchargers and nearly 1.13 million liters of gas have been offset." (Tesla Release, 2014) These energized routes will encourage Tesla customers to enjoy more convenient and free electric trips. Meanwhile Tesla continuously spread its research and development efforts in battery technology innovation. In early March 2014, Tesla "revealed plans to build a new $5-billion lithium-ion battery 'gigafactory'." (Lazenby, 2014) This action will help Tesla to produce "a lower-priced, mass-market electric car by 2017", (China Economic, 2014) since battery cost is a major barrier for promoting electric car to market.

DESCRIBING THE DATA

Data Background

As mentioned in the previous work of the author's research series, the "Dow Jones Sustainability Index" (DJSI) provided a plentiful pool of companies "that lead the field in terms of corporate sustainability" (RobecoSAM). Established in 1999 by RobecoSAM collaborating with S&P Dow Jones Indices and its expertise of a specialist in Sustainability Investing, the annual Corporate Sustainability Assessment (CSA), DJSI helped investors with a comprehensive "objective benchmarks for their sustainability investment portfolio" (RobecoSAM). By the end of 2013, about 2500 of the largest companies in the S&P Global Broad Market have been assessed by CSA, and the top 10% of them have been tracked by The Dow Jones Sustainability World Index (DJSI World) (RobecoSAM, 2013)

So for this study, the authors continued to select companies from the DJSI pool to conduct portfolio analysis to measure the financial performance of these stocks.

Companies Selected

There was a clear trend of automotive to go green. In this paper, the authors decided to dig deeper to see if these green initiatives help these automotive companies to get better financial performance. Additionally the authors would like to see how the automobile industry differed in financial performance compared to other industries, especially consumer goods industry. Because when the economy is bad, consumers may first cut the expense of purchasing a new car while they will still do their grocery shopping. And based on the previous paper, it was known that the consumer goods industry outperformed the market under the DJSI sector.

To see the results, the authors have chosen three groups of data for this research:

Ten auto companies were selected from DJSI worldwide from all the regions.

Five consumer goods companies were chosen from DJSI North America.

Tesla as an outsider, an innovator in the auto industry, which is the pioneer in the industry for green initiatives, was picked as a benchmark for the comparison.

Auto Makers in DJSI Worldwide	Consumer Goods in DJSI North America	Outsider
BMW	Coca-Cola Co.	Tesla
Volkswagen	Kellogg Co.	
Ford Motor	Hormel Foods Corp.	
General Motors	Colgate-Palmolive Co.	
Honda Motor	Kimberly-Clark Corp.	
Toyota Motor Corp.		
Renault S.A.		
Peugeot S.A.		
Hyundai Motor		
Kia Motors		

Moreover, the authors gathered their annual financial reports from 2009 to 2013 and also their historical stock price during that period of time. Because the auto makers were selected from DJSI worldwide, the financial analysis of this paper is based on financial statements publishing in the "Financial Times".

To measure the financial performance of these companies, the following metrics were selected for the calculation:

ROE "Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested." (Investopedia)

Stock Return, the authors calculated average daily stock return of these companies based on the assumption that an investor could buy and sell at any time during the period of holding the portfolio

Gross Margin, is "A company's total sales revenue minus its cost of goods sold, divided by the total sales revenue, expressed as a percentage. The gross margin represents the percent of total sales revenue that the company retains after incurring the direct costs associated with producing the goods and services sold by a company. The higher the percentage, the more the company retains on each dollar of sales to service its other costs and obligations." (Invesopedia)

Earnings before interest and Tax, (EBIT) is "An indicator of a company's profitability, calculated as revenue minus expenses, excluding tax and interest". (Investopedia)

Profit Margin is "A ratio of profitability calculated as net income divided by revenues, or net profits divided by sales. It measures how much out of every dollar of sales a company actually keeps in earnings. A higher profit margin indicates a more profitable company that has better control over its costs compared to its competitors."(Investopedia)

Results and Analysis:

Following the previous work, in this study the authors continued to create a portfolio in which a beginner will invest an equal share of each company in a given pool using basic investing skills.

Because the authors chose the companies from different markets, the majority of the research is to compile and sort the data. Moreover, in order to capture the trend, the authors analyzed five year financial reports and historical stock prices for these 16 stocks, and also the S&P500 index. Although most of the companies listed above have their fiscal year end with the calendar year, two Japanese public companies set their fiscal year from April 1st to March 31st.

So all the financial statement records were following the companies' fiscal year. This research included the information of selected companies from fiscal year 2009 to 2013. Also because among these 16 companies, eight of them are public outside the US, all the financial data used in this research came from Financial Times website instead of SEC filing. For accuracy consideration, the authors did not convert currency to USD for those companies outside the US. As an alternative, the authors used the original currencies of financial reports to calculate all the metrics. The historical stock prices used to calculate the stock return rate were from Dec. 31st 2008 to Dec. 31st 2013. That also applied to the calculation of S&P500. Additionally ROE of S&P500 was based on S&P500 listed companies' annual SEC filing reports.

Table 1 (Appendix) indicates the ROE of these 16 companies and S&P 500 from fiscal year 2009 to 2013. In general, consumer goods companies from DJSI have a higher ROE than automobile companies in DJSI World and S&P500. When the market experienced significant volatility from 2009 to 2013, automotive companies reacted more dramatically compared to consumer goods companies, especially in the U.S. market, which was highly correlated to S&P500. However, if an investor held the stock from 2009 to 2013, he would find that automotive companies experienced a greater increase of ROE than S&P 500. Seven of eleven automakers have a larger increase of ROE than S&P500 (62%), while all consumer goods companies have less of a rate increase in ROE. Tesla gained the largest point increase of ROE from 2009 to 2013.

Table 2 (Appendix) contains the stock return rates of eleven automakers, five consumer goods companies and S&P500. Except 2011, if an investor held a portfolio of these 10 automakers from DJSI from 2009 to 2013, he would gain much more stock return compared to holding a portfolio of consumer goods companies. Only in 2011, it would help the investor gain more in stock return if he held a portfolio of consumer goods companies. The average annual stock return of ten auto makers was -20.58%, compare to -1.12% for S&P 500 and 10.87% for five consumer goods.

Moreover, automakers in DJSI had two to five times stock return rate than S&P500 from 2009 to 2013 except 2011. If the investor only purchased stock of Tesla, he would enjoy a better return of stock than S&P500 or any other automakers in 2011 when seven out of 10 automakers suffered loss in stock return. Especially in 2013, the annual stock return of Tesla was 325.42%, which was greater than any other in the list.

From Table 3 to Table 5 (Appendix), the comparison focused on the profitability performances between automotive and consumer goods companies in DJSI, and also with Tesla. From 2009 to 2013, the average annual gross margin of these ten automakers in DJSI is from 14% to 18% while the consumer goods companies experience 36% to 37% average annual gross margin. Tesla had more volatility in these five years. Its gross margin went from 9% in 2009 to highest 30% in 2011, dropped to 7% in 2012, and went back to 23% in 2013. There was a 29% increase of average annual gross margin among ten automakers in DJSI while consumer goods companies had a slight (2%) decline of their average annual gross margin. Furthermore, Tesla's gross margin increased 154% from 2009 to 2013, which outperformed the average of automakers and consumer goods

As indicated in Table 4 (Appendix), although automotive companies had lower margin before interest and tax than consumer goods companies, eight out of ten automakers improved more than 50% in this ratio from 2009 to 2013 when the biggest increase of consumer goods companies in margin before interest and tax was 20%. The data also showed that consumer goods companies in DJSI had more stable margin before interest and tax in these five years when automakers including Tesla, went through negative margin to positive one.

A similar situation was indicated in Table 5 (Appendix) for profit margin. In general, from 2009 to 2013 consumer goods companies had larger average annual profit margin, which was around 10%, than automobile companies, which was around 5%. However, automakers had a greater improvement of their average annual profit margin. Eight out of ten automakers in DJSI had more than a 100% increase in their profit margin from 2009 to 2013 while Kellogg Co. had the maximum 27% increase of average annual profit margin in consumer goods companies. And Tesla increased its profit margin with the largest point change among its comparison companies from 2009 to 2013.

CONCLUSION

The numbers above indicate that if an individual invested in a portfolio composed of these 10 automotive companies selected from DJSI worldwide from 2009 to 2013, he would have a 35.5% annual return rate compare to 13.5% annual return rate of S&P500 and portfolio of five consumer goods companies listed in DJSI NA. If he only invested in Tesla from 2010 to 2013, he would at least gain 91.2% average annual return rate. To measure the efficiency of managing the investment of the company, ROE showed that consumer goods companies' management outperformed the S&P500 and automakers. But the market seemed to focus more on the improvement of the management team of the companies. Investors are looking more for increase of management efficiency rather than a stable ROE. That explains why even when Tesla had negative ROE, it still beat consumer goods companies in stock return rate and also S&P500. A similar pattern was displayed by other selected automakers in DJSI worldwide. The market demonstrated confidence in these companies which improved their management efficiency.

For the profitability, consumer goods companies had higher gross margins than automotive companies. But their margin before interest and tax and profit margin dropped more points than automakers. What is more, when most automakers increased their gross profit by improving their business process, consumer goods companies were facing the decline of their gross profit. The ability of increasing the companies' profitability helped automakers gain more attention and confidence from the market.

Additionally, based on the external pressure on automotive companies, "go green" initiatives attracted attention of the market to these automakers and encouraged them to take more responsibility for social sustainability, like reducing CO2 emission and fuel consumption. The effort thata automakers made in increasing their social responsibility was paid back in their stock performance.

APPENDIX

Return on Equity (ROE) = Net Income / Total Shareholder Equity										
	Industry	Company	Market	2009	2010	2011	2012	2013	% Change	Point Change
1	Automotive	BMW	Germany	0.98%	13.50%	17.89%	16.67%	14.99%	1423%	14.00
2		Volkswagen	Germany	2.72%	14.87%	26.78%	28.01%	10.36%	281%	7.64
3		Honda Motor	Japan	3.42%	6.20%	12.00%	4.81%	7.29%	113%	3.87
4		Toyota Motor Corp.	Japan	-4.34%	2.02%	3.95%	2.69%	7.92%	282%	12.26
5		Renault S.A.	France	-19.55%	15.38%	8.69%	7.12%	2.57%	113%	22.12
6		Peugeot S.A.	France	-9.43%	8.20%	4.25%	-52.90%	-33.67%	-257%	-24.24
7		Hyundai Motor	South Korea	13.73%	18.50%	20.63%	19.45%	16.45%	20%	2.72
8		Kia Motors	South Korea	14.52%	26.87%	25.28%	22.94%	18.85%	30%	4.33
9		Ford Motor	United States	-34.74%	-974.89%	134.50%	35.52%	27.12%	178%	61.86
10		General Motors	United States	371.09%	17.06%	24.11%	17.07%	12.55%	-97%	-358.54
11		Tesla	United States	-84.85%	-74.40%	-113.39%	-316.80%	-11.09%	87%	73.75
1	Consumer Goods	Coca-Cola Co.	United States	18.12%	19.85%	25.84%	25.14%	29.25%	61%	11.14
2		Kellogg Co.	United States	53.35%	59.64%	48.22%	39.98%	50.97%	-4%	-2.37
3		Hormel Foods Corp.	United States	16.16%	16.49%	17.84%	17.74%	15.89%	-2%	-0.27
4		Colgate-Palmolive Co.	United States	73.52%	82.36%	102.36%	112.93%	97.22%	32%	23.70
5		Kimberly-Clark Corp.	United States	34.85%	31.15%	30.31%	35.11%	44.11%	27%	9.26
S&P500				10.75%	18.57%	86.67%	34.97%	17.37%	62%	6.62

Table 1 Return on Equity

Stock Return Rate								
	Industry	Company	Market	2009	2010	2011	2012	2013
1	Automotive	BMW	Germany	42.35%	85.06%	-15.77%	37.19%	12.23%
2		Volkswagen	Germany	-70.28%	37.53%	-7.74%	53.25%	16.68%
3		Honda Motor	Japan	58.84%	3.38%	-27.31%	28.74%	32.42%
4		Toyota Motor Corp.	Japan	28.90%	-17.01%	-21.44%	51.48%	50.70%
5		Renault S.A.	France	95.15%	20.17%	-39.20%	47.39%	44.11%
6		Peugeot S.A.	France	94.73%	20.08%	-58.77%	-56.66%	71.64%
7		Hyundai Motor	South Korea	190.17%	45.80%	20.34%	2.82%	9.49%
8		Kia Motors	South Korea	187.66%	143.27%	27.05%	-15.04%	-0.36%
9		Ford Motor	United States	336.68%	67.90%	-37.62%	16.35%	16.89%
10		General Motors	United States		7.81%	-45.30%	36.96%	40.30%
1	Consumer Goods	Coca-Cola Co.	United States	25.88%	17.43%	7.27%	3.36%	9.87%
2		Kellogg Co.	United States	21.32%	-3.98%	-0.61%	10.68%	7.31%
3		Hormel Foods Corp.	United States	23.68%	33.35%	14.46%	6.96%	41.11%
4		Colgate-Palmolive Co.	United States	19.87%	-2.19%	15.79%	14.78%	22.67%
5		Kimberly-Clark Corp.	United States	20.80%	-1.05%	17.45%	15.31%	20.93%
Average of 5 Consumer Goods Campanies in DJSI				22.31%	8.71%	10.87%	10.22%	20.38%
Average of 10 Automotive Companies in DJSI				107.13%	41.40%	-20.58%	20.25%	29.41%
S&P500				19.67%	11.00%	-1.12%	11.68%	26.39%
11	Automotive	Tesla	United States		11.47%	7.29%	20.62%	325.42%

Table 2 Stock Return Rate

Gross margin = Gross Profit / Sales										
	Industry	Company	Market	2009	2010	2011	2012	2013	% Change	Point Change
1	Automotive	BMW	Germany	10.51%	18.08%	21.13%	20.16%	20.08%	91.13%	9.58
2		Volkswagen	Germany	12.91%	17.93%	18.01%	18.35%	18.25%	41.34%	5.34
3		Honda Motor	Japan	25.89%	25.23%	27.30%	25.52%	25.64%	-0.95%	-0.25
4		Toyota Motor Corp.	Japan	10.10%	11.96%	12.52%	11.81%	15.51%	53.59%	5.41
5		Renault S.A.	France	17.15%	19.34%	18.46%	16.28%	17.89%	4.30%	0.74
6		Peugeot S.A.	France	15.61%	18.68%	16.50%	14.18%	15.02%	-3.79%	-0.59
7		Hyundai Motor	South Korea	22.31%	23.47%	24.29%	23.09%	22.28%	-0.17%	-0.04
8		Kia Motors	South Korea	21.81%	22.11%	23.27%	22.66%	21.19%	-2.85%	-0.62
9		Ford Motor	United States	10.41%	15.63%	13.55%	13.07%	12.81%	23.08%	2.40
10		General Motors	United States	-7.21%	12.30%	12.71%	7.10%	11.62%	261.10%	18.83
Average of 10 Automotive Companies in DJSI				13.95%	18.47%	18.78%	17.22%	18.03%	29.25%	4.08
11	Automotive	Tesla	United States	8.93%	26.50%	29.90%	7.26%	22.65%	153.71%	13.72
1	Consumer Goods	Coca-Cola Co.	United States	36.89%	36.94%	36.58%	35.97%	34.85%	-5.52%	-2.04
2		Kellogg Co.	United States	42.87%	43.16%	39.04%	38.49%	41.61%	-2.94%	-1.26
3		Hormel Foods Corp.	United States	16.82%	17.16%	16.90%	16.18%	16.14%	-4.01%	-0.67
4		Colgate-Palmolive Co.	United States	58.77%	59.14%	57.31%	58.14%	58.74%	-0.05%	-0.03
5		Kimberly-Clark Corp.	United States	33.59%	33.17%	31.46%	32.65%	34.23%	1.91%	0.64
Average of 5 Consumer Goods Campanies in DJSI				37.79%	37.91%	36.26%	36.29%	37.12%	-1.78%	-0.67

Table 3 Gross Margin

Margin before interest and tax = EBIT / Sales										
	Industry	Company	Market	2009	2010	2011	2012	2013	% Change	Point Change
1	Automotive	BMW	Germany	0.56%	8.16%	11.63%	10.77%	10.50%	1780.4%	9.94
2		Volkswagen	Germany	1.76%	5.63%	7.07%	5.97%	5.92%	235.9%	4.16
3		Honda Motor	Japan	1.89%	4.24%	6.38%	2.91%	5.52%	191.2%	3.62
4		Toyota Motor Corp.	Japan	-2.25%	0.78%	2.47%	1.91%	5.99%	366.6%	8.23
5		Renault S.A.	France	-2.83%	1.63%	2.92%	0.45%	-0.08%	97.1%	2.75
6		Peugeot S.A.	France	-2.92%	3.10%	1.16%	-8.31%	-2.23%	23.6%	0.69
7		Hyundai Motor	South Korea	6.14%	8.84%	10.32%	9.99%	9.49%	54.4%	3.34
8		Kia Motors	South Korea	4.09%	6.95%	8.10%	7.45%	6.64%	62.5%	2.55
9		Ford Motor	United States	2.39%	5.80%	5.46%	4.39%	3.69%	54.2%	1.30
10		General Motors	United States	101.36%	3.91%	3.78%	-20.11%	3.16%	-96.9%	-98.19
Average of 10 Automotive Companies in DJSI				11.02%	4.90%	5.93%	1.54%	4.86%	-55.9%	-6.16
11	Automotive	Tesla	United States	-46.43%	-125.64%	-123.04%	-95.40%	-3.03%	93.5%	43.40
1	Consumer Goods	Coca-Cola Co.	United States	12.35%	12.06%	12.47%	11.51%	11.13%	-9.9%	-1.22
2		Kellogg Co.	United States	15.91%	16.43%	10.81%	11.00%	19.18%	20.5%	3.27
3		Hormel Foods Corp.	United States	8.22%	8.96%	9.40%	9.29%	9.21%	12.1%	0.99
4		Colgate-Palmolive Co.	United States	23.59%	22.42%	22.95%	22.76%	20.41%	-13.5%	-3.17
5		Kimberly-Clark Corp.	United States	14.78%	14.04%	11.71%	12.75%	15.17%	2.6%	0.39
Average of 5 Consumer Goods Campanies in DJSI				14.97%	14.78%	13.47%	13.46%	15.02%	0.3%	0.05

Table 4 Margin before Interest and Tax

Profit margin = Net Income / Sales										
	Industry	Company	Market	2009	2010	2011	2012	2013	% Change	Point Change
1	Automotive	BMW	Germany	0.40%	5.34%	7.09%	6.62%	6.99%	1635.8%	6.58
2		Volkswagen	Germany	0.91%	5.39%	9.67%	11.27%	4.62%	405.7%	3.70
3		Honda Motor	Japan	1.37%	3.13%	5.98%	2.66%	3.72%	171.6%	2.35
4		Toyota Motor Corp.	Japan	-2.13%	1.11%	2.15%	1.53%	4.36%	304.9%	6.49
5		Renault S.A.	France	-9.27%	8.78%	4.91%	4.30%	1.43%	115.4%	10.70
6		Peugeot S.A.	France	-2.40%	2.02%	1.00%	-9.03%	-4.28%	-78.6%	-1.89
7		Hyundai Motor	South Korea	3.25%	8.31%	9.84%	10.14%	9.78%	200.9%	6.53
8		Kia Motors	South Korea	3.35%	7.49%	7.91%	8.18%	8.02%	139.6%	4.67
9		Ford Motor	United States	2.34%	5.09%	14.91%	4.24%	4.87%	108.4%	2.53
10		General Motors	United States	100.22%	4.55%	6.12%	4.06%	3.44%	-96.6%	-96.78
Average of 10 Automotive Companies in DJSI				9.80%	5.12%	6.96%	4.40%	4.29%	-56.2%	-5.51
11	Automotive	Tesla	United States	-46.43%	-125.64%	-123.04%	-95.40%	-3.03%	93.5%	43.40
1	Consumer Goods	Coca-Cola Co.	United States	8.84%	9.29%	9.04%	8.40%	8.12%	-8.1%	-0.72
2		Kellogg Co.	United States	9.64%	10.38%	6.56%	6.77%	12.22%	26.7%	2.58
3		Hormel Foods Corp.	United States	5.25%	5.48%	6.00%	6.07%	6.01%	14.5%	0.76
4		Colgate-Palmolive Co.	United States	14.95%	14.15%	14.53%	14.47%	12.86%	-13.9%	-2.08
5		Kimberly-Clark Corp.	United States	9.86%	9.33%	7.63%	8.31%	10.13%	2.7%	0.27
Average of 5 Consumer Goods Campanies in DJSI				9.71%	9.73%	8.75%	8.80%	9.87%	1.7%	0.16

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Table 5 Profit Margin

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