

## **THE VOLKSWAGEN EMISSIONS SCANDAL - A CASE STUDY ON UNETHICAL BUSINESS PRACTICES**

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**ABSTRACT:** *At the end of 2015, car manufacturing industry was rocked by the disclosure of an unethical practice used by Volkswagen, one of the most prominent actors within automotive industry. Following the research on environmental procedures conducted by the International Council of Clean Transportation (ICTT) and West Virginia University, representatives of the Volkswagen group (VW) have been forced to admit that they had deliberately installed some “defeat devices” aimed at reducing the amount of emissions registered during vehicle testing under laboratory conditions. Thus, on road vehicle tests revealed a  $0.85 \text{ g km}^{-1}$  level of NOx emissions for VW Jetta and VW Passat, exceeding over four times the maximum limit of  $0.18 \text{ g km}^{-1}$  stipulated by the European regulations. Taking into consideration the direct impact on health condition of the people living in the affected countries and the huge amount of costs associated with the overflow of pollution from VW cars, the paper brings into focus some systems of ethical analysis provided by the literature - utilitarianism, the ethics of virtues, universalism and teleological theory – in order to demonstrate why this unethical business practice severely altered sustainability principles and should be eradicated in the future.*

**KEY WORDS:** *unethical practice, utilitarian theory, virtue ethics, deontological ethics, utilitarianism, teleological theory.*

**JEL CLASSIFICATION:** *M14, Q01, K32.*

### **1. INTRODUCTION**

Business ethics takes into account the moral conduct of corporations in relation with employees and business partners on the one hand, respectively with customers and consumers on the other. From a macroeconomic perspective, the application of ethics is an approach that influences the functioning of the entire economic system, because immoral behaviors can distort the functioning mechanisms of the market,

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affect the quality of the environment or seriously harm the interests of consumers. Being a process of evaluating actions, pragmatic ethics uses as general reference the generally accepted moral standards at the society level. Viewed from a specific ethical point of view, moral standards or norms are imperative statements that determine what a conscious individual should do or not do, so that his or her conduct is judged appropriate by the people or community. As a consequence, the moral demands of the society are embodied in the economic practice in the form of these norms of behavior. Another distinguishing feature of moral norms is given by their objectivity, which comes from the reality that norms do not have to represent one's will, but are generated and applied due to objective needs that have arisen out of the specific relations between people.

Along with the moral norms, a series of more general moral commands can be elaborated to include and justify a set of norms with a lower generality. These are called moral principles in the literature and have the function of generating a model of behavior and a set of criteria to differentiate the right actions from the wrong ones in a wide variety of situations. While a moral norm is set up to guide behavior in concrete situations with very well defined particularities, a moral principle has a more abstract formulation and can cover a wider range of cases that can be encountered in business practice.

At a more general level compared to that of moral norms and principles, ethical analysis systems and theories can be developed, in order to establish a set of behavioral norms for providing general criteria, which can be used in almost all situations encountered in practice, aiming at guaranteeing the correctness of human actions. At the level of general ethical discourse, we can distinguish between two major types of arguments. On one hand, there are arguments based on the consequences of an action on those involved, on the benefits and damages brought by a certain course of action, and on the one hand, ethical arguments that appeal to moral principles can be formulated.

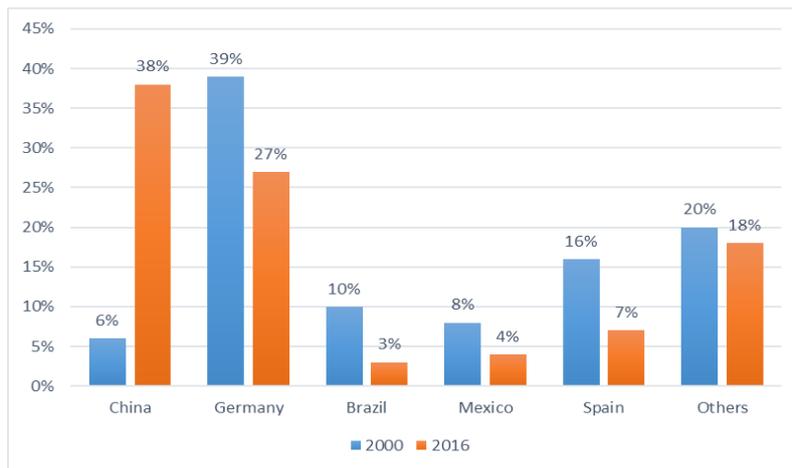
## **2. BACKGROUND**

Volkswagen was founded in 1937 to manufacture the car that will become known as Beetle. The company's production increased rapidly in the 1950s and 1960s. In 1965 Volkswagen bought Auto Union, which subsequently produced the first post-war Audi models. Volkswagen launched a new generation of front-wheel drive vehicles in the 1970s, including Passat, Polo and Golf; the latter became the bestseller. Volkswagen took over SEAT in 1986, which became the company's first non-German brand and gained control of Škoda in 1994, Bentley, Lamborghini and Bugatti in 1998, Scania in 2008 and Ducati, MAN and Porsche in 2012. The company's operations in China have grown rapidly in the last decade, the country becoming the largest market for the German company vehicles (see figure 1).

Statistics show that Toyota, VW, Hyundai and General Motors were listed amongst the biggest automakers worldwide in 2016. From Volkswagen representatives' point of view, fiscal year 2016 was severely affected by the so-called "the Diesel issue". However, Volkswagen managed to keep the second place in the top

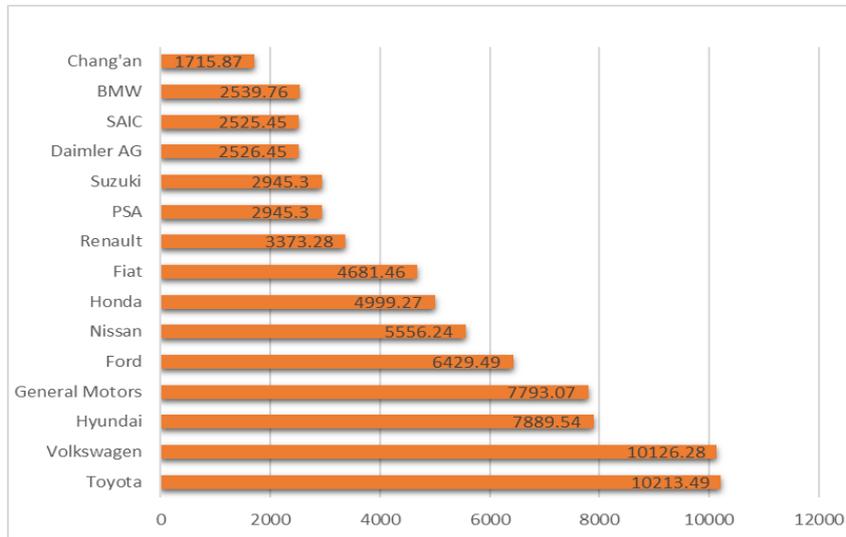
of the leading vehicle manufacturers in 2016, reaching the record of 10.1 million vehicles sold, with a 1.9% increase in sales revenue (figure 2).

As a Diesel engine manufacturer, Volkswagen had to make the optimum compromise between power, fuel efficiency and polluting emissions. Usually, an additional system is required to bring the level of nitrogen oxides to the level required by law. One solution is to use a urea injection system (SCR=Selective Catalytic Reduction) on the exhaust system.



Source: [www.oica.net](http://www.oica.net)

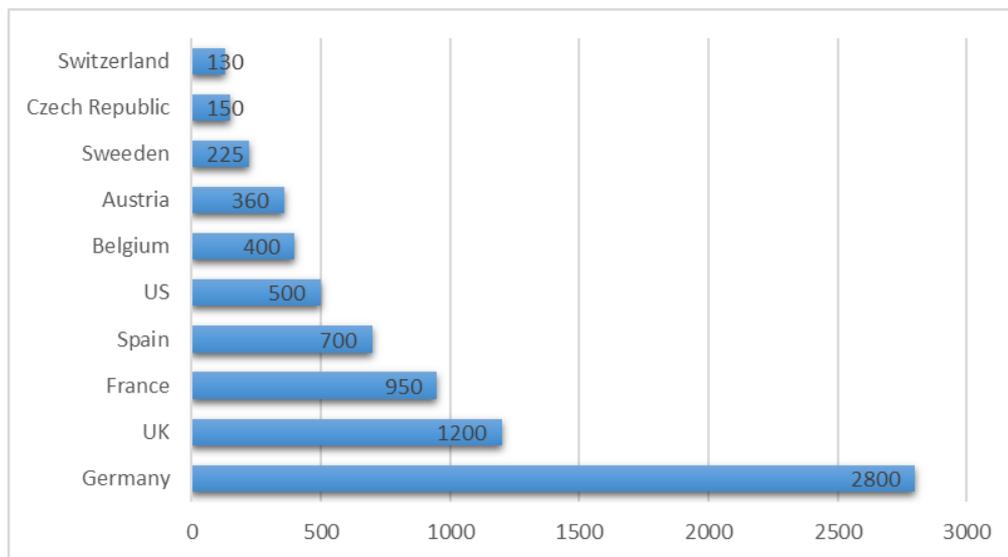
**Figure 1. Volkswagen – Internationalization of production 2000 to 2016  
Contry shares of the VW production – 2000 and 2016**



Source: Statista, 2016

**Figure 2. Leading motor vehicle manufacturers worldwide in 2016,  
based on production (in 1,000 units)**

This system has quite high efficiency for treating nitrogen oxides (around 90-95%) but the cost is also high due to the components and the relatively complex control system. For medium and large displacement engines (over 2.0 liters) the SCR system is the general solution which is used. For smaller cylinders (below 2.0 liters), where the cost of manufacturing must be controlled because it has a significant impact on the final price of the car, the use of SCR systems is not an option. An alternative solution is to use a NO<sub>x</sub> catalyst (LNT=Lean NO<sub>x</sub> trap).



Source: Statista, 2016

**Figure 3. Number of Volkswagen Diesel vehicles equipped with emissions manipulating software as of October 2, 2015, by country (in 1,000s)**

The root of the corruption scandal consisted in accusations made by EPA - *Environmental Protection Agency* - according to which the company would have programmed worldwide approximately 11 million vehicles to cheat on environmental tests by using a software which was able to detect when the cars were verified by regulators. Under the circumstances, the software – which controlled the engine’s dissipating system - would falsely return diminished levels of toxic emissions as compared to on-road real levels. In other words, Bloomberg Business Week clarifies that when the car recognized the laboratory conditions associated with an emission test – i.e. particular driving patterns; velocity barometric pressure; the rotation of two wheels instead of four etc. – it was programmed to shift to a cleaner operation mechanism called “dyno calibration”. Running this way, the car becomes more environmentally friendly but, on the long term, this operating mode cannot be supported without dropping fuel efficiency or reducing engine’s power. (Cavico & Mujtaba, 2016). Therefore, the clean running of VW vehicles was promoted only when

the testing circumstances were recognized by the line of the software code installed by the manufacturer.

### 3. ANALYSIS OF THE VOLKSWAGEN CASE – AN ETHICAL PERSPECTIVE

The central issue raised by this study is: *To what extent is it morally permissible for Volkswagen to use its technical know-how for its own interest, misleading environmental tests? The ethical dilemma is shaped in the same sense: to use or not the technical knowledge available for deceiving environmental tests to their advantage?*

In the following, I shall detail four of the ethical analysis systems that will underpin the in-depth case study initiated in the case of Volkswagen.

**I. The utilitarianism** was founded by **Jeremy Bentham** (1748-1832) and later developed by **John Stuart Mill** (1806-1873), as a as a teleological conception on morality: *"the moral value of the conduct of a person can be determined only by the consequences of his behavior, respectively the benefits and the satisfactions for the soul that he can obtain"; "righteous and moral is what maximizes pleasure and reduces suffering"* [Bişu, 2014; Țigu, 2003]. The central concept on which utilitarian theory is founded is that of "**utility**". Based on microeconomic theory, the utility is defined through the perception of an individual / corporation regarding the net benefits they derive from an action, good / service, compared to the costs to be committed for their realization.

The ultimate goal of utilitarianism is to ensure "*maximum of good for maximum of people*". Using such a concept, decisions will be made based on a prior calculation of the most likely consequences of these; a decision will be considered appropriate if it will lead to significant benefits for the persons involved and will be considered inadequate if it harms, produces damages, generates high costs for the community etc. Proponents of utilitarianism recommend the use of simple rules in business: "always tell the truth", "never break a contract", "respect your business partners" etc., rules that could generate the most significant benefits, in the majority of cases. Analyzing from a utilitarian point of view, an ethical dilemma can be investigated according to the consequences resulting from the two actions put in the balance (see table 1). An action is morally permissible if it maximizes the general welfare of those involved. A decision is good if it ensures maximum good for as many people as possible. The affected parties in this case are:

- Volkswagen and its employees;
- The clients;
- The dealers (e.g. *Auto Nation*, in Romania);
- The competitors;
- The communities where the cars having problems were sold.

**Table 1. Analysis of the consequences of moral action**

Affected parties	List of negative consequences on stakeholders	List of positive consequences for stakeholders
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Volkswagen and its employees	- image losses reflected in sales, bad reputation affecting consumer loyalty affecting not only the brands involved in the scandal	- increased sales during 2008-2015 and related financial gains
Clients	- they paid up to \$ 6,000 more for a vehicle	- they enjoyed a stronger engine and a lower consumption which resulted in cost reductions at the personal budget level
Dealers (e.g. Auto Nation)	- sales and low profit following the scandal	- increased sales during 2008-2015 and related financial gains
Competitors	- disadvantage on the market in front of Volkswagen, sales and lower profit within the period 2008-2015	- an eventual consolidation of image and reputation
The communities where the cars having problems were sold	-researchers estimate that due to nitrogen dioxide emissions released between 2008-2015, 60 people will die prematurely, others will suffer from chronic bronchitis, various respiratory and cardiovascular diseases.	- benefits from the taxes collected from VW between 2008 and 2015

(Source: Ionescu M., *Ethics in international affairs' management, Graduation Dissertation, University of Petroșani, 2018*)

It is obvious that **Volkswagen's actions do not pass the utilitarian moral test**, having far more negative consequences for the affected parties. Besides, even for the company, the balance seems to be negative in the long term.

On the other hand, **Ethical egoism** classifies as ethical any action that brings about benefits for the initiating company. The major rationale that supports this approach is that striving for oneself own advantages can be judged as ethical, as the fundamental economic theory states that every entity performs in its own self-interest. This is amongst the fewer theoretical approaches that seem to explain Volkswagen's behaviour. The company undoubtedly pursued its own self-interest when they decided to defraud the pollution tests in order to improve its economic performances: the sales volume, the net income, the return on stock and, finally, shareholder's prosperity [Abitalib, 2017].

**II. The ethics of virtues** is the ethics based on the Aristotelian tradition inaugurated by the work of the Greek Philosopher Nicomachean ethics. It was Aristotle who initiated the theoretical discussions about "civic virtues". Happiness is an activity of the soul that takes place according to virtue. The condition of the correct behavior of any person was, in Aristotle's opinion, the possession of the virtue of fairness. Aristotle asserts that virtue is "a habitus" (habit) of the choice of the middle path, as a wise man would establish it. The middle approach is located between two habits considered wrong: between the mistake of the surplus and that of the lack. According to Aristotle, if we refer to the feelings of fear and confidence that accompany the anticipation of the

effects of a decision, the middle path is defined by courage. And between deception and naivety, prudence is considered the middle way, and therefore - virtue.

The modern ethics of virtue was developed by David Hume (1711-1776) and Adam Smith (1723-1787). In general, from the perspective of the ethics of virtue, business is a fundamental segment of contemporary society; the commercial activities within them do not have the sole purpose of achieving the profit, but they emphasize the social relations and the self-respect; therefore, the generation of utilities in material form is a means used to achieve the entrepreneur's goals and not for the purpose itself [Iamandi, 2010].

Consequently, the Aristotelian conception of business ethics emphasizes the formation and promotion of positive behavioral traits of economic agents who will assimilate and apply a set of values focused on social responsibility and generosity.

Approached from **the point of view of ethics of virtue**, VW's decision to deceive and commit fraud was not profitable in the long term, because the corporation seriously violated its ethical principles: improving the quality of products and respect for its customers, satisfying as much as possible the consumers, ensuring a stable climate, stimulating employees and conquering their devotion to the company, maintaining stable and best relations with suppliers and creditors, appreciation and sympathy of the community in which the company is located, the most scrupulous respect of the laws in force, environmental protection. As a market player, the company did not contribute to the formation and development of the positive character traits of the economic agents and did not contribute to the formation of a set of values based on social responsibility and altruism.

**III. The universal (deontological) approach** is found, essentially, at the opposite pole to the theory of utilitarianism. Supporters of this theory argue that the morality of an action cannot depend on the results, because they are indefinite and uncertain when making the decision; the moral value of an action must be evaluated according to the intentions underlying it and whether the agents acted out of duty.

At the heart of this approach is the moral conception of Immanuel Kant (1724-1804), who puts the idea of duty and justice above the problem of good and considers that justice is, in fact, a criterion that accompanies the good. According to the definition presented above, personal intentions can be considered as equivalent to personal debts or obligations, because when the decision maker wants the good of those who bear the consequences of his decision, the action modalities that will follow will become more duties than working options. Some postulates of this theory could be formulated as follows: "treat the others as goals, not as means", "one member of a group has a responsibility for the well-being of the other members of the group", "behave with others as you wish they would with you", "**behave in such a way that your conduct becomes a universal law**".

In the case of VW emissions scandal, the deontological approach is brought up for discussion, due to the practice of deliberate misleading of the pollution tests. Logically, deceiving is seen as a dishonest practice and, therefore, from the deontological point of view, it is classified as an unethical activity. Yet, it is advocated in the literature that this line of thinking ignores the fact that the action was carried out for economic and market reasons. Thus, it is argued that VW management pursued at

the time objectives related to the maximization of stakeholders' wealth and the increase of the market share by leveraging technology as a competitive advantage in relation to other automakers.

On the top of everything, the deontological approach neglects other crucial facets of the ethical dilemma, such as outcomes generated by the action. Further on, opponents of Kant's theory on deontological ethics consider that the approach discharges feelings and human sensitivity form the global equation of the internal business environment. An in-depth analysis revealed that Volkswagen's corporate culture was fear-based and lower level managers were made vulnerable to distress pressure techniques. Within this framework, it could be postulated that they turned a blind eye on fraudulent emissions tests either for the sake of fulfilling their specific sales objectives or in an attempt to escape from being dismissed. Therefore, when we take into consideration the human relations perspective in management, our way of looking towards deontology could be dramatically reversed [Abitalib, 2017].

Besides, it can be easily seen that the action does not go beyond the universalization of the saying, because it is not desirable for any of the participants that deception and fraud become general practices and all car manufacturers pollute the environment and include fraud among their current business practices.

IV. At the opposite pole, the **teleological theory** incorporates the consequences of an action in order to assess to what extent it can be reckoned as a moral endeavor or an immoral one. When implementing this approach in Volkswagen's case, the practice of tricking emissions tests is automatically catalogued as an unethical action, due to its multiple harmful consequences upon a very large number of innocent people.

Thus, considering the severity of negative consequences generated by "Dieselgate" – from early deaths caused by excess emissions to enormous losses for various stakeholders and the dropping of sustainability principles – we can state that the action of deceiving the emissions tests falls undoubtedly into the category of immoral business practices.

#### 4. CONCLUSIONS

During my paper writing, I have tried to employ a multifaceted approach aimed both at diminishing the risk associated with narrow-mindedness and at encompassing numerous modern conceptions regarding ethics. Nevertheless, the most well known approaches such as deontological ethics, utilitarianism, virtue ethics and the teleological theory are convergent in concluding that the practice of manipulating the emissions tests by Volkswagen represented one of the most severe deviation from principles that govern the ethical way of doing business in the contemporary period. Besides, the deceptive manipulation encountered within the company's annual and sustainability reports, where prominent leaders from Volkswagen made some definite commitments regarding the corporate sustainability, points in the same direction that reinforces the above-stated conclusion.

It is also important to stress that I have encountered in the literature other points of view according to which the Volkswagen scandal cannot even be classified as an ethical dilemma [Kidder, 2009]. Thus, Rushworth Kidder, author of the book *How*

*Good People Make Tough Choices*, made very clear the dissimilarity between an *ethical dilemma* (“a right versus right” option) and a *moral temptation* (which can be considered “a right versus wrong” alternative). An ethical dilemma implies at least two solutions, both of them being moral; at the same time, the moral temptation does refer to any moral alternative. Apparently, in deciding upon the cheating of emission test results, the Volkswagen representatives did not receive a “false impression” that they faced a *right versus right* dilemma. It was more than evident at that time that the choices they had were *right versus wrong*.

From the company’s point of view, perhaps the most pertinent theory to analyse the Volkswagen Diesel issue was represented by the ethical egoism, according to which misleading the emissions tests would represent an action that brought about a massive increase in the stock value and a corresponding augmentation in stakeholders’ wealth. However, the self-pursuit principle which lays the foundation for the ethical egoism approach is, for good reason, vehemently contested in the literature. In other words, economic reasons such as increasing company’s benefit and performances are arguments that fade when balanced with the profoundly negative impact of unethical actions undertaken by Volkswagen management: increasing the incidence of premature deaths due to excess of NO<sub>x</sub> in the atmosphere; the appearance of acid rain; the fact that Volkswagen was burdened by huge costs in the form of fines, penalties, expenses incurred in repairing vehicles that had installed the software for handling pollution tests; payment of compensation to cover the huge losses recorded by the dealers in their own distribution network; erosion of the company's long-term image and loss of customer loyalty etc.

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