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Analysis of Sustainability Reporting in the Turkey Automotive Sector

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Abstract
Sustainability reporting is a responsibility practices related to corporate performance measurement for sustainable development objectives. Prepared as a requirement of the responsibility for the internal and external stakeholders. Companies share the non-financial information relating to business activities through sustainability reports. Sustainability reports were developed with GRI Reporting Framework and encompass organization's results in the context of strategy and management approach in a reporting period. A sustainability report is an organizational reports that provide economic, environmental, social and governance information about performance. Implementation of corporate sustainability and sustainability reporting has continued to grow steadily in recent years. This is true for companies in the automotive sector.The automotive sector is considered as the locomotive of the world economy in all industrialized countries due to the significant contribution both employment and the economy in terms of export statistics. With Sustainability Reporting, companies provide significant gains in the area of talent management and supply chain, occupational health and safety at work, with the acquisition of the environmental performance. In this context; the study aims to analyze sustainability reports of the companies operating in the automotive sector in Turkey Istanbul Stock Exchange Sustainability (BIST) Index on the basis of social performance data with TOPSIS method.
Keywords: Sustainability Reporting, TOPSIS Method, Sustainability Reporting in Automotive Sector

Introduction

The adaption of corporate sustainability and sustainability reporting has continued to grow steadily in recent years. This idea based on no healthy society or economy can exist in a world with so much poverty and pollution. Conventional methods of economic and social development has failed to consider the importance of environment. Now the new approach is to meet people's basic requirements while striving to assure the health of the environment and economic prosperity for all people.

The concept of "Sustainable Development", as part of it also "Corporate Social Responsibility", is gaining attraction of companies. Sustainable development seeks to take account of and integrate the economy, ecology and society in order to preserve the world's environmental and cultural resources for future generations while also respecting diversity and reducing social inequality (Nunes, Valle, Schebek, & Peixoto, 2010). Society demands more transparency and companies want to and must communicate about their sustainability performance. This concept also contains the economic survival of companies (Lieback, Moosmann, & Felker, 2013).

The challenges surrounding issues of sustainability and its implementation are strongly felt in the automotive sector. The automotive sector faces the following challenges: intensifying competition, increasing importance of corporate sustainability and corporate social responsibility (CSR), more discerning customers rising costs of raw materials, tighter regulations (e.g., concerning CO2 emissions), greenwashing, and maintaining reputation. As these challenges show, sustainability plays an important role in the automotive sector today (Sukitsch, Engert , & Baumgartner , 2015). It is a clear need for company action, and at the same time, there is also wide recognition that sustainability offers considerable potential.

In our study, the relationship between the concept of sustainability and automotive sector was explained. The reports of the automotive companies are located in the Sustainability Index in BIST were analyzed with TOPSIS method.

Relationship Between Sustainability And Automotive Sector

A sustainability report is an organizational report that provide information about economic, environmental, social and governance performance. Sustainability reporting is a term used synonymously with various concepts such as triple responsibility reporting, corporate social responsibility reporting, non-financial reporting and so on (Sustainability Reporting Guidelines, 2000-2011).

Companies can report about information by the stakeholders' request, so that the investors can evaluate the long-term viability of the company. They also report information that helps them to assess their long-term viability by analyzing their own operating models and activities and how they handle and influence social, economic, human, and natural resources. Companies will also disclose their positive and negative impacts on the economy, environment, and society. Corporate sustainability reporting submit company's sustainability strategies

and progress that is made towards achieving goals.

Corporate sustainability is taken into account when defining business objectives, particularly with respect to issues relating to stakeholder demands and the environment. In this context new challenges are emerging for the automotive industry in general, and for OEMs in particular. In addition, stakeholder requirements, especially those of consumers and political representatives, are also undergoing rapid change. Here environmental acceptability, cleaner technologies, and new forms of mobility play a key role. Moreover, the motives behind consumer purchases are becoming less emotional and more functional. It is expected that by the next decade a new form of mobility will become dominant in Europe, North America, and Japan, one where environmental awareness and quality of life determine modal choice. As these challenges show, corporate sustainability plays an important role in the automotive industry today. The OEMs are attempting to optimize existing power trains, develop innovative driving technologies and new distribution models, as well as to build an efficient global structure and network (Nunes, Valle, Schebek, & Peixoto, 2010).

Many of the main car makers have joined the United Nations Global Compact (in chronological order: Daimler, BMW, Renault, Volvo, Volkswagen, PSA, Nissan, Ford, Hyundai and KIA) [3]. Global Reporting Initiative (GRI) is working in close connection with United Nations programs such as United Nations Environment Programme (UNEP) and the UN Global Compact (UNGC). GRI is a non-profit organization and has multiple stakeholders.

The automotive sector in Turkey is among the first three major sectors today. Share of the automotive and automotive parts production manufacturing in gross domestic product is at 20%, while its share in GDP is estimated at about 5%. Direct share of the automotive sector in industrial employment was 6%, and when including sub-industry and other sides, the share in industrial employment is expected to reach 20%. Automotive is in the medium-high tech sectors and also among the highest unit value-added sectors in the export of major industries and sub-industries. Its share in employment and becouse of being most export sectors, the sector have a strong effect on the entire economy as well as other sectors (Sustainability Reporting Guidelines, 2000-2011)- (TSKB Ekonomik Araştırmalar, 2015)- (ODD, 2016). It is operating worldwide.

Parallel to the developments in worldwide, automotive company is supposed to be leading in sustainability activities and sustainability reporting.

Literature Rewiev

This section presents an overview of the relevant literature.

Jasch & Lavicka (2006) conducted a study is based on a project with the Styrian automobile cluster in Austria and selected member companies. In six companies, the environmental management costs, as well as further costs for health and safety, risk management and other social issues were assessed. Less tangible items and external effects are addressed. Starting with the efforts to assess the financial effects of the sustainability performance indicators provided by the Global Reporting Initiative (GRI) for sustainability reporting, the UN DSD (United Nations Division for Sustainable Development) method for environmental management accounting (EMA) was enlarged by several other cost categories. This paper describes these and the experiences from the pilot projects. The two major cost drivers are the purchase costs of non-product output and the costs related to lost working days because of sick leave and accidents and the overtime pay to make up for these lost working days. The work of the Environmental Health and Safety (EHS) department helps to reduce these costs. The cost assessment scheme allows one to better understand the relationships between costs for treatment of undesired effects due to unimplemented protection measures and lost material purchase value in comparison to the prevention costs, which mainly consist of the internal management departments and related external consultants. The assessment of sustainability management costs is of interest for organisations, which already publish a sustainability report and want to more accurately assess the financial effects of such aspects addressed via EMA. It is also useful for small and medium sized companies, which use the assessment as a starting point to shape their (EHS) system. The main benefits are more accurate data and better arguments for investment appraisal or performance indicators as well as improved consistency of information and management systems that should help them to improve their environmental, social and economic performance (Jasch & Lavicka, 2006).

Kehbila, Ertel, & Brent (2010) conducted survey on the state of corporate sustainability within the South African automotive industry. The survey focused on the meaning and relevance of sustainability to South African automotive companies, and their use of different approaches to implement sustainability in corporate practice. On this score, the paper seeks to analyze and compare the levels of voluntary environmental initiatives between large and small and medium-sized enterprises within the automotive milieu. Survey results reveal that a majority of automotive companies have sought to improve their environmental performance by integrating environmental considerations into their core activities. Although the majority of these companies have standardized EMSs, our analysis reveals considerable differences between companies' approaches to corporate sustainability. In particular, they varied in the extent to which procedures were formalized and documented behind the corporate rhetoric of a high commitment to sustainability. The paper concludes by prescribing a number of recommendations as to how

to engage and promote more widely the South African automobile manufacturing companies in environmental change (Kehbila, Ertel, & Brent, 2010).

Cortez and Cudia (2010) studied of industries further explore how environmental innovations measured through environmental costs of Japanese automotive and electronics companies impact their financial performance. This study uses the descriptive and exploratory case study design in comparing fiveautomotive and five electronic Japanese manufacturing companies' environmental innovations measured through environmental costs and the related impact on sales, net income and assets. Statistical tests using regression analysis reveal that environmental innovations in terms of costs show a linear relationship with the financial performance of Japanese firms included in the study. This might imply that any change in the environmental investments and expenses made by the companies would result to a corresponding level of change in their sales, net income and assets (Cortez & Cudia, 2010). Sukitsch, Engert , & Baumgartner (2015) analyzed sustainability reports of 14 manufacturers in the European automotive industry with respect to issues of corporate sustainability implementation. The main aim of this analysis to understand how manufacturers in the European automotive industry implement corporate sustainability. As a result the analysis shows that while companies are well-aware of the significance of sustainability for their industry, some tend to be leaders, and others laggards, as far as implementation is concerned. Results confirm the importance of specific policy instruments in implementation, such as the use of environmental management systems and standards, and of related changes in organizational structures (Sukitsch, Engert , & Baumgartner , 2015).

As a result of PWC's (2011) study on 215 companies It is stated that a large portion of manufacturing companies published sustainability report. This result is important in today's conditions where the increasing importance of environmental factors (PWC, 2011). Senal and Aslantaş Ateş (2012) examined the structure of corporate sustainability accounting and reporting process. In this study they claimed that sustainability development promotes using various accounting and costing methods such as environmental accounting, environmental managerial accounting, and life cycle costing (Senal & Aslantaş Ateş, 2012). With the integration of organizations to the world markets in Turkey, sustainability reporting will be important. Istanbul Stock Exchange Sustainability Reports of companies located in the Sustainability Index was investigated by Pamukçu and Ozdemir (2016). It was found that companies which is included in sustainability index have published business and incenssant reports since 2007. In these premises they concluded that companies share business of financial reporting as well as social, environmental and governance performance clearly (Pamukçu & Özdemir, 2016).

4. Analysis Of Sustainability Reporting In The Turkey Automotive Sector

Sustainability reports should focus on four main aspects of a company, including the social, environmental, economic, and governmental issues and advances. For most companies to have an interest in sustainable development needs to be an expected financial benefit. But often organisations are not able to precisely tell their environmental or social costs and even less, the benefits and savings from improved environmental and social performances. Many companies are interested in the social and economic dimensions of sustainable reporting. Especially environmental issues are not being priorities of many firms. For the automotive industry, social factors are important as well as environmental factors. Social Performance Indicators concerns the impacts an organization has on the social systems within which it operates. The GRI Social Performance Indicators identify key Performance Aspects surrounding labor practices, human rights, society, and product responsibility (Sustainability Reporting Guidelines, 2000-2011).

The main objective of the study is to determine social sustainability performance of companies which operates in the automotive sector in Turkey and the BIST Sustainability Index by using TOPSIS performance evaluation system.

In Turkey there are few studies done by TOPSIS method. Uygurtürk and Korkmaz (2012) in their study analyzed financial performance of the companies by TOPSIS method by using traded 13 base metal industry enterprises' financial statements in 2006-2010 in the Istanbul Stock Exchange (ISE). As a result, the performance scores of the basic metal industry company operating in the period of analysis were generally vary (Korkmaz & Uygurtürk, 2012). Demirelli (2010) for his work analyzed performance of public banks in operating nationwide widely by TOPSIS method. As a result of study, state-owned banks operating in nationwide commonly were affected by the local and the global financial crisis, performance points fluctuated constantly according to the data of the overseas, the banking sector did not achieve an improvement noticeable vary (Demirelli, 2010). Ergüden and Çatlıoğlu (2016) investigated enviromental performance evaluation of four chosen companies taking care of the sustainability report data published in 2013. Sustainable contribution to energy companies using TOPSIS method was examined on the basis of different criteria. Companies that most contribute to sustainability in Turkey was defined as Zorlu Energy (Ergüden & Çatlıoğlu, 2016). CSR in the automotive industry comprises a great variety of issues emerging during the production, use and disposal phases. Automotive suppliers should adopt a lifecycle approach paying attention to CSR issues in all stages of their supply (Martinuzzi, Kudlak, Faber, & Wiman, 2011).

Sustainability reports of 4 companies listed in the BIST index (Doğuş Otomotiv, Ford Otosan, Otokar, Tofas) were included in the analys. The data used in this study were obtained by examining the sustainability report was published in the respective companies' web sites. Evaluation criterias were selected in accordance with the structure of the performance evaluation system of TOPSIS.

4.1 TOPSIS Method

TOPSIS (Technique for Order Preference by Similarity to Ideal Solution) was developed in 1981 by Yoon and Hwang (Hwang & Yoon, 1981).

It based on the main principles that the proximity of the decision point to the ideal solution. TOPSIS method comprises a solution consisting of 6-step process. The steps of the TOPSIS method are described at below (Özdemir, 2014) .

Step 1: Creating Decision Matrix (A)

Lines of the decision matrix consist of decision points that desired listed advantages, while the column is located assessment factors to be used in decision making. A matrix is the initial matrix created by the decision makers. The decision matrix is shown as follows:

$$A_{ij} = \begin{bmatrix} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ . & & & . \\ . & & & . \\ . & & & . \\ a_{m1} & a_{m2} & \cdots & a_{mn} \end{bmatrix}$$

In A_{ij} matrix, M is the number of decision points, n is the number of data evaluation factors.

Step 2: Creating Standard Decision Matrix (R)

Standard Decision Matrix, taking advantage of the A matrix elements and is calculated using the following formula.

$$r_{ij} = \frac{a_{ij}}{\sqrt{\sum_{k=1}^{m} a_{kj}^2}} \qquad (1)$$

R matrix is obtained as follows:

Step 2: Creating Standard Decision Matrix (R)

Standard Decision Matrix, taking advantage of the A matrix elements and is calculated using the following formula.

$$r_{ij} = \frac{a_{ij}}{\sqrt{\sum_{k=1}^{m} a_{kj}^2}} \qquad (1)$$

R matrix is obtained as follows:

$$R_{ij} = \begin{bmatrix} r_{11} & r_{12} & \cdots & r_{1n} \\ r_{21} & r_{22} & \cdots & r_{2n} \\ . & & & . \\ . & & & . \\ . & & & . \\ r_{m1} & r_{m2} & \cdots & r_{mn} \end{bmatrix}$$

Step 3: Creating Weighted Decision Matrix Standard (V)

First of all, weights for the evaluation factor (w_i) is determined ($\sum_{i=1}^{n} w_i = 1$).

Then elements in each column of the matrix R is multiplied by the value corresponding w_i . V matrix is generated. V matrix is shown below;

$$V_{ij} = \begin{bmatrix} w_1 r_{11} & w_2 r_{12} & \dots & w_n r_{1n} \\ w_1 r_{21} & w_2 r_{22} & \dots & w_n r_{2n} \\ . & & & . \\ . & & & . \\ . & & & . \\ w_1 r_{m1} & w_2 r_{m2} & \dots & w_n r_{mn} \end{bmatrix}$$

Step 4: Creating ideal (+) and negative ideal (-)Solutions

TOPSIS method assumes that monotonically increasing or decreasing trend of each of the evaluation factors. To build the ideal solution set, weighted assessment of the factors in the V matrix which is the largest of the column value (about evaluation factor minimization way the smallest) is selected. Finding the ideal set of solutions shown in the following formula.

$$A^* = \left\{ (\max_i v_{ij} \,|\, j \in J), (\min_i v_{ij} \,|\, j \in J' \right\} \qquad (2)$$

Set will be calculated from the (2) formula shown as $A^* = \{v_1^*, v_2^*, ..., v_n^*\}$

Negative ideal solution set is created by selecting weighted assessment of the factors in the matrix V which is the smallest of the column value (corresponding evaluation factor maximization way is the greatest). The presence of negative ideal solution set shown in the following formula.

$$A^- = \left\{ (\min_i v_{ij} \,|\, j \in J), (\max_i v_{ij} \,|\, j \in J' \right\} \qquad (3)$$

Set will be calculated from the (3) formula shown as $A^- = \{v_1^-, v_2^-, ..., v_n^-\}$

In both formulas also the value J shows benefit (maximization) and J' shows losses (minimization). Both ideal and negative ideal solution set consists of a number of assessment factors that m elements.

Step 5: Calculation of Discrimination Measures

In TOPSIS method, the Euclidian distance approach is used in order to find the deviation of the value of evaluation factors for each decision point from the ideal and negative ideal solution sets. The deviations related to the decision point obtained here is called the measure of Ideally Discrimination (S_i^*) and negative ideal Discrimination (S_i^-). Ideal separation (S_i^*) calculats by using the formula (4), wherein the calculation of the measure of negative ideal separation (S_i^-) is shown in the formula (5).

$$S_i^* = \sqrt{\sum_{j=1}^{n} (v_{ij} - v_j^*)^2} \qquad (4)$$

$$S_i^- = \sqrt{\sum_{j=1}^{n} (v_{ij} - v_j^-)^2} \qquad (5)$$

Burada hesaplanacak S_i^* ve S_i^- sayısı doğal olarak karar noktası sayısı kadar olacaktır.

Calculated number of S_i^* ve S_i^- will naturally be up to the number of decision points.

Step 6 : Calculating the relative proximity to the Ideal Solution

The calculation of the relative proximity of each decision point to the ideal solution (C_i^*) is utilized from the ideal and negative ideal separation sizes. The criteria used here is the share of negative discrimination measure in total separation ideal measure. Calculating the ideal solution to the relative proximity values are shown in the following formula.

$$C_i^* = \frac{S_i^-}{S_i^- + S_i^*} \qquad (6)$$

Burada C_i^* değeri $0 \le C_i^* \le 1$ aralığında değer alır ve $C_i^* = 1$ ilgili karar noktasının ideal çözüme, $C_i^* = 0$ ilgili karar noktasının negatif ideal çözüme mutlak yakınlığını gösterir.

C_i^* value is in the range of $0 \le C_i^* \le 1$ and $C_i^* = 1$ shows absolute closeness of the respective decision point to the ideal solution, $C_i^* = 0$ shows absolute closeness of the respective decision points to the negative ideal solution

4.2 Implementation

4.2.1 Companies Include in The Research

Companies include in the analyz is shown in Table 1.

Table 1: Companies include in the analyz

No.	Company Name
1	Doğuş Otomotiv
2	Ford Otosan
3	Otokar
4	Tofaş

4.2.2. Performance Data Of Companies

Performance data was choosen from sustainability reports, preparing according to GRI 4 standard, of the subject companies in 2015. Average training per employee and EHS training for cantractors and employee have been chosen as the social performance indicators. In this context, social performance data for choosing organizations are located in Table 2.

Table 2: The social performans data of the companies

Firm's	Average training per employee (Time/Employee)	EHS training for Contractors employees (The number of participants)	EHS training (The number of participants)
Tofaş	40,25	4392	8756
Ford	82	1681	10504
Otokar	25	127	1774
Doğuş Otomotiv	29	-	-

4.2.3 Creating A Decision Matrix

In the first step of the analysis is determined decision points and evaluation criteria. Table 3 shows the decision matrix. Lines indicate decision points and columns indicate the evaluation factors. Calculation of the evaluation factors in the matrix based on social performance indicators was published in the sustainability report of the organizations.

Table 3: Decision Matrix

Firm's	1	2	3
Tofaş	40,25	4392	8756
Ford	82	1681	10504
Otokar	25	127	1774
Doğuş Otomotiv	29	-	-

4.2.4 Standard Decision Matrix Creation

In the second stage of TOPSIS is creation of standart decision matrix. When to applying formula in step 2 of data in Table 3, we can get Table 4 values. The Table 4 shows us standard decision matrix of companies involved the research.

Table 4: Standard Decision Matrix

Firm's	1	2	3
Tofaş	0,4448	2,6053	0,8219
Ford	1,4761	0,3826	1,1757
Otokar	0,2609	0,0270	0,1297
Doğuş Otomotiv	0,3062	0,0000	0,0000

4.2.5. Standard Weighted Decision Matrix Creating

In order to create a standard decision matrix, weight value must be determined as shown in Table 5.

Table 5: Weight Value

1	2	3
0,4000	0,3000	0,3000

Weight value is used in order to calculate weight standart matrix. Table 6 was created via multiple all the elements of Table 4 with elements of Table 5.

Table 6: Weight Standard Matrix

Firm's	1	2	3
Tofaş	0,1779	0,7816	0,2466
Ford	0,5904	0,1148	0,3527
Otokar	0,1043	0,0081	0,0389
Doğuş Otomotiv	0,1225	0,0000	0,0000

4.2.6 Obtaining the Ideal Positive (A+) and Ideal Negative (A-) solution Value

The next stage of TOPSIS method is create solution set consists an ideal positive (A+) and negative ideal (A-) which is located in Table 7. Elements of the new table contain determining maximum and minimum values in our standard decision pillars.

Table 7: Ideal Positive (A+) With Ideal Negative (A-)

	Doğuş	Ford	Otokar
Min	0,1043	0,0000	0,0000
Max	0,5904	0,7816	0,3527

4.2.7 Calculation of Discrimination Measures

The next stage of TOPSIS method is calculate the distance between alternatif. The values shown in Table 8 was calculated by using formulas (4) and (5).

Table 8: Distance between Alternatives

Firm's	S*	S-
Tofaş	0,4260	0,8229
Ford	0,6668	0,6115
Otokar	0,9659	0,0398
Doğuş Otomotiv	0,9769	0,0181

4.2.8 Calculating the relative proximity to the Ideal Solution

The sixth stage of TOPSIS method is calculated of how close it is to find the place to each alternative of making ideal. The result located in Table 9 obtaining using Formula (6).

Table 9: Relative proximity of the Ideal Solution

Firm's	C*
Tofaş	0,6589
Ford	0,4783
Otokar	0,0395
Doğuş Otomotiv	0,0182

Order from bigger to smaller according to c* value is Tofaş- Ford-Otokar-Doğuş. Tofaş has higher value with 0,6589 point. Ford is the second firm with 0,4783 points, Otokar is third firm with 0,0395 points and Doğuş is last company with 0,0182 points.

4.3 Result

In this study, social performance of four chosen companies was evaluated taking care of the sustainability report data published in 2015. The value of average training per employee and EHS training for contractors and employee chosen as determining factor for firms including research. In the end of this research, Tofaş is take the highest number with point 0.6589 giving importance training. Doğuş has a lowest performance with 0.0182 point.The information about EHS training was not found in Doğuş sustainability report.

5. Conclusions

Requirements for corporations to disclose corporate sustainability reports yearly continually grows, however with

no universal guide or set requirements, corporations are at the leisure of disclosing whichever information they find most valuable to their own benefit. As business sustainability reporting becomes more common in the global marketplace. Car manufacturers still recognize the importance of corporate sustainability implementation in practice.

When viewing sustainability reports throughout time, they are used as a guide to putting the positive and negative aspects of the company into context year after year. If a company sets forth sustainability reports each year, it illustrates its dedication to the issue of sustainability.

References

Cioffi, L. (2014). Measuring Quality of Corporate Sustainability Reporting: A Case Study of the Automotive Industry.

Cortez, M., & Cudia, C. (2010). The Impact Of Environmental Innovations On Financial Performance: The Case Of Japanese Automotive and Electronics Companies. Journal of International Business Research, 9(Special Issue 1), 33-46.

Demirelli, E. (2010). TOPSIS Çok Kriterli Karar Verme Sistemi: Türkiye'deki Kamu Bankaları Üzerine Bir Uygulama. Girişimcilik ve Kalkınma Dergisi, 5(1), 101-112.

Ergüden, E., & Çatlıoğlu, E. (2016). Sustainability Reporting Practiceses In Energy Companies With Topsis Method. Muhasebe ve Finansman Dergisi, 201-221.

Hwang, C., & Yoon, K. (1981). Multiple Attribute Decision Making: Methods and Application. NewYork: Springer.

Jasch, C., & Lavicka, A. (2006). Pilot project on sustainability management accounting with the Styrian automobile cluster. Journal of Cealner Production, 1214-1227.

Kehbila, A., Ertel, J., & Brent, A. (2010). Corporate Sustainability, Ecological Modernization and the Policy Process in the South African Automotive Industry. Business Strategy and the Environment, 453–465.

Korkmaz, H., & Uygurtürk, T. (2012, Ekim). Finansal Performansın TOPSIS Çok Kriterli Karar Verme Yöntemi İle Belirlenmesi: Ana Metal Sanayi İşletmeleri Üzerine Bir Uygulama. Eskişehir Osmangazi Üniversitesi İİBF Dergisi , 7(2), 95-115.

Lieback, J., Moosmann, S., & Felker, Y. (2013). Sustainability Management In The Automotive Industry Drawn From Their Reporting. Berlin: GUTcert.

Martinuzzi, A., Kudlak, R., Faber, C., & Wiman, A. (2011). CSR Activities and Impacts of the Automotive Sector. RIMAS Working Papers, 1-29.

Nunes, K., Valle, R., Schebek, L., & Peixoto, J. (2010). Automotive Industry Sustainability Reports: A Comparison Of Brazilian And German Factories. VI CONGRESSO NACIONAL DE EXCELÊNCIA EM GESTÃO Energia, Inovação, Tecnologia e Complexidade para a Gestão Sustentável, (s. 1-24). Brasil.

ODD. (2016). Genel Değerlendirme Aralık 2015. İstanbul : Otomotiv Distrübütörleri Derneği.

Özdemir, M. (2014). TOPSISTOPSIS: Operasyonel, Yönetsel ve Stratejik Problemlerin Çözümünde Çok Kriterli Karar Verme Yöntemleri. Bursa: Dora Basım-Yayın Dağıtım.

Pamukçu, F., & Özdemir, Z. (2016). Kurumsal Sürdürülebilir Raporlama Sisteminin Borsa İstanbul Sürdürülebilirlik Endeksi Kapsamındaki İşletmelerde Analizi. Mali Çözüm, 13-35.

PWC. (2011). Türk İş Dünyası'nda Sürdülebilirlik Uygulamaları Değerlendirme Raporu. İstanbul: PWC.

Senal, S., & Aslantaş Ateş, B. (2012). Kurumsal Sürdürülebilirlik İçin Muhasebe ve Raporlama. Muhasebe ve Denetime Bakış, 83-97.

Sukitsch, M., Engert , S., & Baumgartner , R. (2015). The Implementation of Corporate Sustainability in the European Automotive Industry: An Analysis of Sustainability Reports. September 12, 2016 tarihinde www.mdpi.com/journal/sustainability adresinden alındı

Sustainability Reporting Guidelines. (2000-2011). July 15, 2016 tarihinde www.globalreporting.org: https://www.globalreporting.org/resourcelibrary/G3.1-Guidelines-Incl-Technical-Protocol.pdf adresinden alındı adresinden alındı

TSKB Ekonomik Araştırmalar. (2015). Otomotiv Sektöründe Üretim Kayıplarının Etkileri-Otomotiv ve Yan Sanayi Değerlendirmesi Mayıs 2015. İstanbul: TSKB.