

ANALYSIS ON STOCK SHARE DATA TO UNDERSTAND IF SPONSORSHIP CAN BACKFIRE THE PROFIT OF A COMPANY

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1. ABSTRACT: In this paper, I am going to discuss how an incident by a Football icon Cristiano Ronaldo during UEFA Euro Cup 2020 affected the stock share prices and volumes of a very worldwide renowned company, Coca-Cola which is a sponsor of the tournament. How much the Coca-Cola company along with two other relative companies were really affected are analyzed with the help of Tableau software here taking the prices and volumes as to our data which were collected from the online sources.

Here, after collecting the data of the three companies, it was cleaned and merged. Then the data were filtered so that we do not have to deal with big data where this incident could not affect and only that portion of data was taken where we can get a clear image of the effect after the incident. Then, it was analyzed with the available data in Tableau, and predictions were made about how the incident affected the share stock prices.

Keywords: Football, UEFA, Coca-Cola, Stock market, Analysis.

2. INTRODUCTION: Football is a worldwide sport and people from all around the world know about Football which is also known as Soccer in some countries. It is one of the most popular sporting events in the whole World. People love playing this sport regardless of race, religion, or age and sooner it became more than just a sport and the players became their role model. And people from all over the world watch football and almost every country in the world has a representative team who compete to play in the Football World Cup. According to ROADTRIPS, the 1950 Football World Cup Final game holds the record for attendance at a sporting event in an enclosed stadium with 199,854 spectators. Also, in terms of TV viewership, the Football World Cup 2018 was tuned by 3.262 billion people which is almost half of the population of the world. So, it is no surprise that companies select this sporting event to reach the audience and sponsor it. This step by the companies increases their stock prices, business, and popularity very fast. Just like this sport, football players are worldwide icons as well. Cristiano Ronaldo has 312 million followers on Instagram. So, just in the pace Coca-Cola reached to the people, a stand by Ronaldo also reached to the people very fast.

One of these incidents on which this paper is based on the stand by Cristiano Ronaldo against Coca-Cola. During a post-match press conference, Ronaldo removed a Coca-Cola bottle from the table and put a Water Bottle in that place and said “Aqua”. Ronaldo is a fitness enthusiast and this action by him was supported by W.H.O. (World Health Organization) and gave the people of the world a message to limit intake of sweet and sugary drinks. Meanwhile, after that incident, Coca-Cola’s stock market value plummeted by £2.8 billion. Some other players also followed Ronaldo such as Manuel Locatelli from Italy did the same with a Coca-Cola bottle and Paul Pogba from France removed a Heineken bottle whereas Andriy Yarmolenko from Ukraine put both of the Coca-Cola and Heineken bottles just in front

of him to highlight those and Russian team Head coach Stanislav Cherchesov opens up a Coca-Cola bottle and drank from it. Though the Coca-Cola company faced some difficulty but it did recover from it pretty fast and some share-holders faced some losses. And more importantly, the real situation was not as bad as the media showed the world.

Stock Price: Various companies or more importantly startups sometimes do not have enough capital to start their idea of business. During that time, through various processes, when shares are issued, those publicly-traded companies are given a price. This is mainly a primary price and people can buy these shares of the companies. They spend some amount of money and buy some percentage of that company. Now the people of the company got their capital to start their business and work. From time to time, if the company does good and rises, then the stock prices of that particular company also rise. It can also backfire. If the management were unable to do good, then the stock prices decrease. Those people who buy the shares of the company can earn from it mainly by two processes. First one is, some companies pay dividends which means that the company makes payments to the shareholders, if this is the case, the shareholder generally does not need to sell their shares because they are getting some income from the dividends itself. Another way is to buy the share when the price was low and after it by time to time, the company becomes successful, the share price increases and one can sell their part of share at that time. It is not important that only the startups sell their shares, most of the big companies from different fields like Coca-Cola, Tesla, Sensex, different types of banks, pharmaceutical companies and Facebook, Microsoft, Apple also have shares in the stock market.

During the Covid-19 crisis, there was a significant loss in the whole world market. After that, the whole world was on complete lockdown. The UEFA Euro Cup was supposed to be held in 2020 but due to the lockdown factor, it was shifted to 2021. Various sponsoring companies also faced some losses. UEFA which organizes the Euro Cup is sponsored by a lot of companies. Till 2019 Heineken was not one of them. After Carlsberg left the sponsorship in 2019, Heineken took their place.

Tableau software is used for the analysis of the effect on the share prices of Coca-Cola and Heineken by the event of Cristiano Ronaldo removing the Coca-Cola bottle and Paul Pogba removing the Heineken bottle in front of whole media and the audience of all of the people of the world. Though Carlsberg was not a sponsor of UEFA during the event, their shares are also analyzed.

3. DATA DESCRIPTION: For this study, the data is obtained on daily open, high, low, and close stock value and also the volume from 2nd January 2019 till 8th July 2021 of the 3 companies Coca-Cola, Heineken, and Carlsberg on which the analysis is based on. It is collected with the help of Google Sheets. Carlsberg stock prices are in DKK currency, Coca-Cola is in USD and Heineken are in Euro. The currencies are not changed in these datasets. In the data, it was observed that, with the date, the time values were also given. So, to merge the data with respect to the dates only, the times were ignored from all the all of the data in the Google Sheet and saved separately as Microsoft Excel Comma Separated Values(.csv) File and later merged and analyzed in Tableau.

The Ronaldo-Coca-Cola incident happened on 14th June 2021. So, the analysis is basically based on the effect in the shares from approximately 15 days before the incident and till after approximately 15 days after the incident. The rest of the data is ignored in the analysis.

The table below shows the features with short descriptions and data types.

SL No.	Feature	Description	Data type
1	Date	The date	Object
2	Open(Carl)	The opening stock price of Carlsberg	Numeric
3	High(Carl)	The highest stock price in that day of Carlsberg	Numeric
4	Low(Carl)	The lowest stock price in that day of Carlsberg	Numeric
5	Close(Carl)	The closing stock price of Carlsberg	Numeric
6	Volume(Carl)	Amount of ownership change of shares of Carlsberg	Numeric
7	Open(Cola)	The opening stock price of Coca-Cola	Numeric
8	High(Cola)	The highest stock price in that day of Coca-Cola	Numeric
9	Low(Cola)	The lowest stock price in that day of Coca-Cola	Numeric
10	Close(Cola)	The closing stock price of Coca-Cola	Numeric
11	Volume(Cola)	Amount of ownership change of shares of Coca-Cola	Numeric
12	Open(Hei)	The opening stock price of Heineken	Numeric
13	High(Hei)	The highest stock price in that day of Heineken	Numeric
14	Low(Hei)	The lowest stock price in that day of Heineken	Numeric
15	Close(Hei)	The closing stock price of Heineken	Numeric
16	Volume(Hei)	Amount of ownership change of shares of Heineken	Numeric

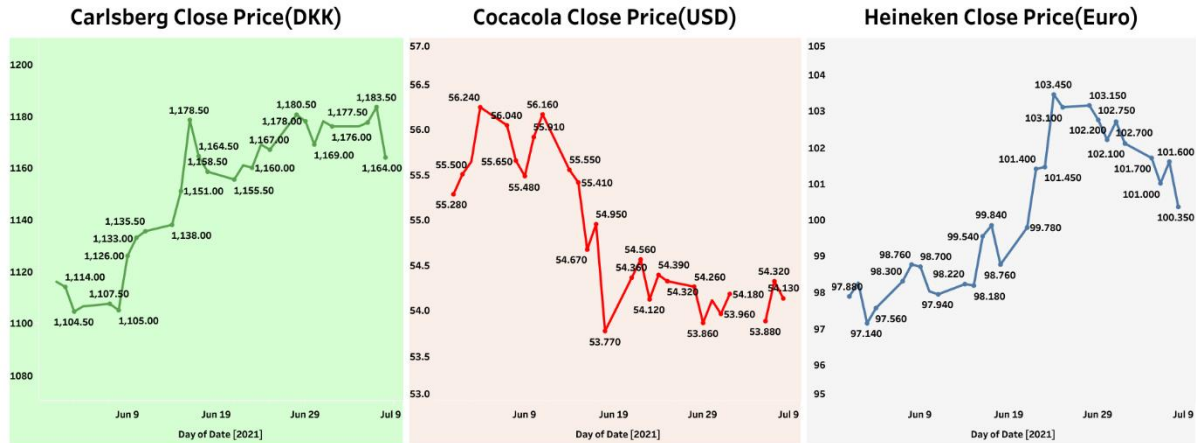
4. RESULTS AND DISCUSSION:

i) The lowest closing price and the highest closing price in that approximately one month time for all of the three companies are shown below in their respective currency:

Carlsberg Lowest Price(DKK) 1,098	Cocacola Lowest Price(USD) 53.55	Heineken Lowest Price(EURO) 96.56
Carlsberg Highest Price(DKK) 1,184	Cocacola Highest Price(USD) 56.48	Heineken Highest Price(EURO) 103.8

The prices are shown in their respective currencies, and there is a significant change of closing lowest and highest in all of these 3 companies.

ii) Now the closing price in these companies are shown below:



At first, in case of Coca-Cola we can observe that, till June 13-14 there was a continuous gain in stock closing price. Other than that, till that date, the losses were not that much significant. But After that, the losses were eye-catching. On 18-19 June, the price was least and after that, the price became stable again. Though the difference was not very much in the prices, but it did make an impact and there was a significant loss for the company.

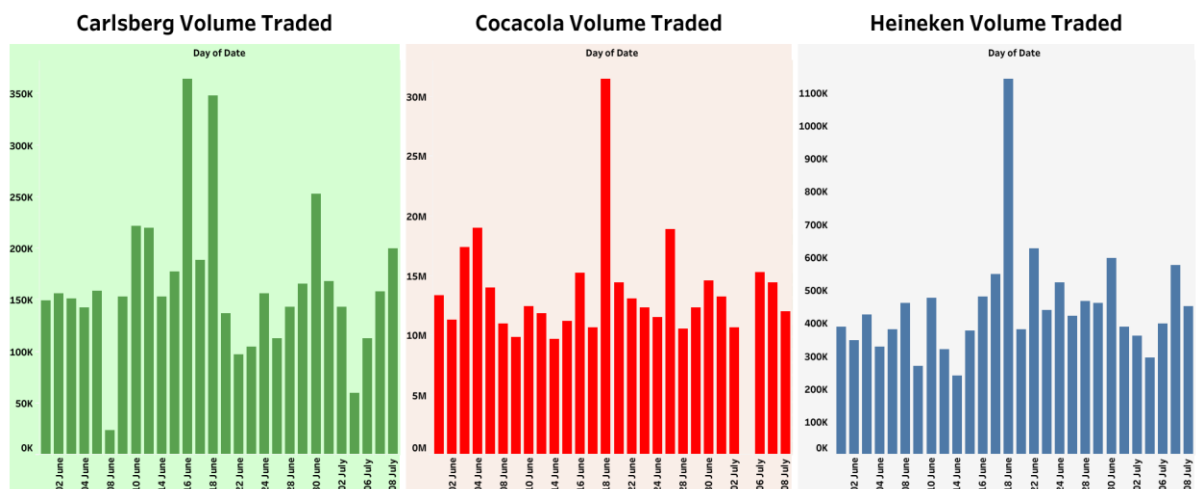
Secondly, in case of Heineken, it is clearly shown that the Heineken bottle removing incident by Paul Pogba did not make an impact as it did in the case of Ronaldo and Coca-Cola. Rather, it is visible that, the close price was at a peak at that time of the incident and after some time, it started to decrease and came down to the point where it should have been if there was no significant effect to change the close price.

Lastly, in case of Carlsberg, they are not anymore the sponsor of the event. Before the incident, it is visible that there was no such significant change in the closing price of Carlsberg. But after 13-14 June, there is a significant gain in the closing price noticeable.

So, we can assume that, though they are not UEFA sponsors anymore, still the incident did affect their stock price as they are in the same category of the company as Heineken.

The main objective of the project was to check the stock closing prices of these companies at that time of the incident.

iii) The number of Volumes traded of these companies are shown below:



Volume traded value is mainly the amount of the ownership change of shares. The frequency of the average values of the volume trade is almost symmetric except for one or two cases. The of volume traded count does not change much in all of these three cases. But after that incident, on 18th June there is a significant change in the volume traded count vs date graph in the sponsoring companies which are Coca-Cola and Heineken. It can be seen that almost double the number of volumes traded on that day with respect to the other days. Also, in the case of Carlsberg who is not a sponsoring company anymore, the incidents did affect that company as well.

iv) Finally, the daily percentage change between the open price and close price are calculated and plotted and a complete dashboard is shown below:

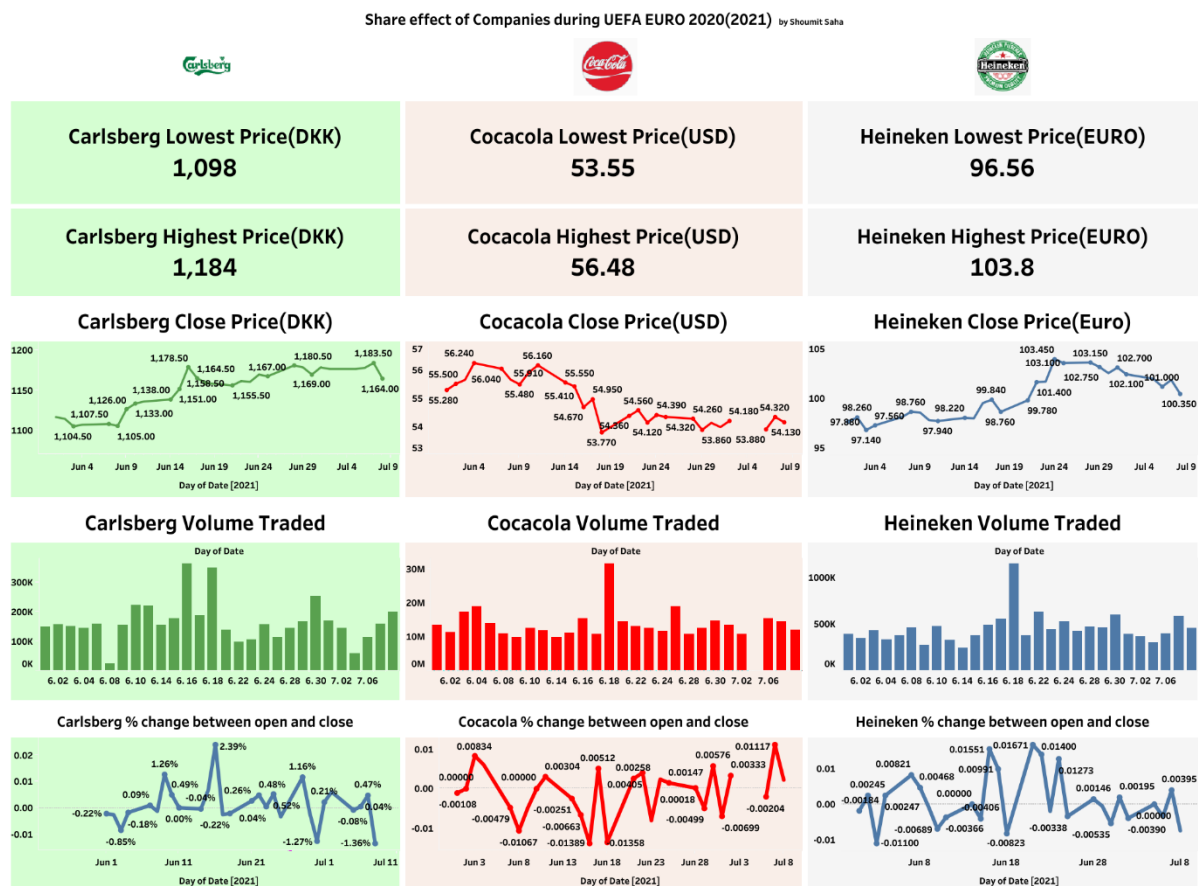


Tableau Dashboard Link to see day by day details:

<https://public.tableau.com/app/profile/shoumit.saha/viz/shareeffectduringeuro2021/Dashboard1>

5. CONCLUSION: Finally, in this paper, we can observe that Ronaldo being a world-renowned footballer took part in the UEFA Euro Cup 2021 and one small incident by him was enough to give a company like Coca-Cola a temporary shock which is a UEFA sponsor itself. But as it was Coca-Cola, it could manage to recover in such a short period of time. But if it was a small company or startup, it was possible that the company would not be able to recover and go bankrupt or out of business. Though Paul Pogba is a World Cup winner footballer but his step against Heineken was not able to make a significant impact though it is seen that, they are facing very mild losses in the closing prices when Coca-Cola is in the recovery phase. It is also noticeable that, though Carlsberg is not a sponsor anymore but still as they were a sponsor for a long period of time and also as they are in the same category as Heineken, they are gaining from the time of that incident.

Lastly, we can observe the most significant unnatural change in the Volume traded vs day graph. After the incident, the stock price begins to low day by day. And in that time, a lot of volume of shares were traded which is more than the double amount of volume traded. We can assume that, because of that incident, the business begins to take a loss and a lot of people got frightened and wanted to get rid of the shares as soon as possible before the share price becomes lesser. So, they sold it at a low price. And other people bought it at this low price. After this 18th June, when the volumes were traded so much, Coca-Cola begins to recover again. So, their share price stopped decreasing. And it is expected to increase again after some days. So, basically, the people who sold their shares in this time of confusion were the ones who lost the most. Among those people, there are a lot of those people too who maybe did not want to sell those but they panicked and sold their shares and got hurt. And those who bought in this time gained the most as they got the shares at really low prices since Coca-Cola started to recover their share prices, there is a very low probability that their share price will fall again.

Same in case of Heineken and Carlsberg, the traders who bought and sold their shares, will face more loss or gain than the companies itself.

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