

# Chapter 9

## ANALYZING THE EFFECT OF THE COVID-19 OUTBREAK ON STOCK RETURNS OF ENERGY COMPANIES IN BIST30

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### INTRODUCTION

The existence of a new epidemic was announced to the world by the Wuhan Health Commission, the National Health Commission of the People's Republic of China, and the Center for Disease Control and Prevention of the People's Republic of China on 31 December 2019 (Er and Ünal, 2020, p.2). An epidemic which affected the whole world has emerged and has spread very quickly. The World Health Organization declared a global epidemic on March 11, 2020, with covid-19 spreading to several countries in a short period of time. Rapid and mass deaths caused by outbreaks both disrupt the balance of the world and affect the economy deeply as well as affecting the political and cultural structures. This situation indicates that the epidemic is not only a disease but also a historical phenomenon. During the epidemic, shops and factories close and prices begin to increase. If the epidemic lasts longer, closing workplaces become unable to afford their employees and lay off their employees. This leads to a significant increase in the number of unemployed. Spending of unemployed people has a decrease in their spending in proportion to their income and a decrease in demand. In the economy, one person's spending means another person's income. Continued spending and income spending due to the outbreak has also negatively impacted the economy.

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## RESULTS

COVID-19, which was declared a global epidemic by the World Health Organization on March 11, 2020, has caused life to stop around the world. Covid-19 outbreak effects on human life began to be investigated in many aspects. Many countries are still fighting COVID-19. It is possible to see that this virus will affect both the countries' own economy and the economic relations of countries with each other in the long term. The purpose of this study analyzes the effect of the COVID-19 outbreak on stock returns of energy companies in BIST 30.

Event study method was preferred when analyzing the study. The application was carried out in accordance with the stages of the event study method. Average abnormal returns, cumulative average abnormal returns, and t statistics values were calculated for 10 days before and 10 days after COVID-19 was declared a global epidemic. As a result of the findings obtained according to the -10,+10 event window, it was determined that the t statistics results of the average abnormal return values on the 9th and 3rd days before the event day, 1st, 2nd, 3rd, 4th, 6th and 9th days after the event day and the event day were significant. On the other days, no significant return is seen. This result indicates that the market is not efficient in the semi-strong form.

This analysis is expected to help to contribute to the lack of financial literature. Analysis of whether COVID-19 has an impact on stock returns of companies operating in other sectors will benefit the literature.

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