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THE IMPACT OF POLITICAL DECISIONS ON OIL AND GAS COMPANIES

F.-T. BOLDEANU[1] I. TACHE[2]

Abstract: *The energy sector has seen many changes in the past years after the coronavirus pandemic and high volatility as Russia invaded Ukraine, with oil and gas stocks having high and lows. Using the event study approach, we analyse the effect of the announcement of the partial mobilization of the Russian army on 21 September 2022 for listed energy companies in Russia. We find that the announcement had a negative effect on Russian oil and gas companies. Moreover, this negative effect was larger one day before the announcement, which can be correlated with a possible insider-trading event. Our results show the riskier profile of the energy sector in relation to possible events like political decisions or declarations. Our findings have important implications for policymakers, who have to take into account the fact that words have meaning on the financial market.*

Key words: *event study, political decisions, energy sector, stock exchange.*

1. Introduction

There is a strong debate regarding the impact of politics on stock market prices and how declarations or political decisions may affect the value of a company. Elections, political declarations or announcements of conflicts between countries can move markets in different ways depending on the impact of that event (Chavali, Alam and Rosario, 2020).

The aim of this paper is to highlight the effects of political declarations that have resulted in civilian mobilization on stock market prices for listed energy companies from the oil and gas sectors. Using the event study approach, the study analyses the effect of the announcement of the partial mobilization of the Russian army on 21 September 2022 for listed energy companies in Russia. We have chosen Russian companies as we want to see the effect of the event in the country where the announcement was made and we selected energy companies because of the large impact on the economy that these firms have in Russia. The results have shown that the announcement had a negative effect on Russian oil and gas companies, with statistically significant values on the day of the event. Moreover, this negative effect was larger one day before the

[1]. Transilvania University of Brasov, florin.boldeanu@unitbv.ro
[2] Transilvania University of Brasov, ileanatache@unitbv.ro

announcement, which can be correlated with a possible insider-trading event.

This paper is organized as follows: the next section is a short literature overview, then we explain the data, methodology and results, and, in the end, the concluding remarks are presented.

2. Literature Review

Following the efficiency market hypothesis, any information related to external or internal events should be incorporated in the stock price of a company. It has been shown that major events, like, for example, political decisions, natural disasters, pandemics, terrorist attacks, corporate events (mergers and acquisitions), public news, political crises, have had a material impact on the stock market (Boldeanu et al., 2022, Shen and Zhang, 2020; Singh et al., 2020).

Uncertainty is taken into account by the capital market when political events happen, like, for example, when countries change their stance from a peace to a belligerent approach, stock prices discount investor's expectations concerning possible future corporate developments. For efficient markets, investors predict the market in a rational way by taking into account the use of all available information and prices react instantaneously to the news (Bittlingmayer, 1998). These political decisions influence the stocks as volatility increases in the short run and can affect the business cycle. A better understanding of the reaction of stock markets returns helps us to understand the impact of this unique events on the economy. The uncertainty associated with political decisions raises doubts about the potential future returns for companies, investment risks and cash-flows in the future and thus cause fluctuations in stock returns (Clemente-Almendros, Boldeanu, Seguí-Amórtegui, 2022).

The energy sector is not immune to political decisions and declarations. In recent years it was among the sectors that suffered from higher risk perception since the pandemic, for example significantly changed the market structure of energy commodities (Huynh, et al., 2021).

Political announcements generate positive or negative returns for companies in the post-event timeframe and also there is an adjustment period to the new political information with a time window of between 2 or 3 days.

3. Data and Methodology

Employing the event study method, this paper concentrates on examining the abnormal returns for a sample of firm stocks as a consequence of the partial mobilization of the Russian army in September 2022. The stock market that we have analysed is the Moscow Stock Exchange, with companies from the oil and gas sectors.

For this investigation we have used the market model to determine abnormal returns (ARs) and cumulative abnormal returns (CARs) for 8 companies listed on the Moscow Stock Exchange with the most trading days in a year. In our methodology for studying the event, we have established some moments in time, represented by the estimation window, the event day and the event window. The date of the event is 21 September 2022. The estimation window consists of 250 trading days. The event window is defined

as t ∈ (-10,10). An event window of 10 days was chosen to measure the impact of the event and analyse the impact of the event pre and post-event. The data was collected from finance.yahoo.com and investing.com, in order to offer comparability and reliability of the data.

The T-test was used to determine the significance of the results and the ordinary least square regression to determine the parameters of the following model.

The market model used for the Moscow Stock Exchange firms is:

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + \varepsilon_{i,t} \quad (1)$$

where $R_{i,t}$ are the returns for the company stock i and $R_{m,t}$ are the returns for the market, the benchmark S&P500 on day t in the estimation window for each event day and $\varepsilon_{i,t}$ is the stochastic disturbance that has to satisfy the condition:

$$E(\varepsilon_{i,t}) = 0, VAR(\varepsilon_{i,t}) = \sigma_i, \quad (2)$$

After determining the coefficients α and β using the actual returns of the company, we determine the expected return for stock i on day t from t_0 to t_1:

$$E(R_{i,t}) = \hat{\alpha}_i + \hat{\beta}_i R_{m,t} \quad (3)$$

The abnormal returns (AR) for stock i on day t during the event window t_0 - t_1 and the cumulative abnormal returns (CAR) are as follows:

$$AR_{i,t} = R_{i,t} - E(R_{i,t}) \quad (4)$$

$$CAR_i(t_0, t_1) = \sum_{t=t_0}^{t_1} AR_{i,t} \quad (5)$$

4. Results

The partial mobilization of the Russian army has had a negative effect on the energy stocks in Russia, as seen in Table 1. Six out of the eight companies that were analysed in this paper had statistical significant coefficients on the day of the event, with a negative sign. The decline in values was between 6% and 9% on the day of the event. In the table below we also see that there was a significant drop in returns for all the 8 companies one day before the event, which in the literature is linked with a potential insider trading event. After the declaration, on day one, the stocks have recovered some of their losses, but on day 3 we see significant negative returns, which show a persistence of the event in the short time.

Abnormal returns for the companies in the event window Table 1

Day	***Abnormal returns (ARs)***							
Ticker	***SIBN***	***GAZP***	***LKOH***	***ROSN***	***SNGS***	***SNGS_p***	***TATN_p***	***TATN***
-10	-1,86%	-1,43%	-2,40%	0,71%	-2,35%	-0,61%	0,28%	-1,89%
-9	0,82%	0,93%	-0,16%	-0,38%	0,81%	0,17%	-0,54%	-1,14%
-8	-1,47%	-1,09%	0,41%	-1,19%	0,98%	-0,81%	-1,94%	0,18%
-7	-0,64%	-2,27%	1,20%	-1,48%	-1,09%	0,19%	0,09%	-0,21%
-6	1,15%	0,82%	0,43%	0,05%	-0,66%	-0,45%	0,87%	-0,33%
-5	-0,22%	0,94%	-1,02%	1,66%	0,79%	0,77%	0,67%	1,20%
-4	3,14%	0,61%	1,70%	-1,49%	2,16%	0,58%	0,84%	0,93%
-3	0,68%	1,23%	0,62%	-0,50%	-0,21%	0,44%	1,22%	-0,04%
-2	-1,54%	0,17%	-0,40%	-0,09%	-0,77%	0,24%	0,04%	-0,08%
-1	-7,27%**	-8,69%**	-9,22%**	-6,48%*	-9,05%**	-4,73%*	-5,80%*	-4,90%
0	-6,94%**	-3,93%	-2,82%	-6,42%*	-7,44%**	-6,03%**	-7,10%**	-8,90%**
1	5,57%**	9,50%**	2,41%	2,97%	2,90%	2,79%	8,66%**	5,83%*
2	-3,14%	-1,07%	-0,30%	-3,37%	-3,50%	-3,59%	-1,88%	-1,67%
3	-4,97%*	-8,05%*	-5,77%*	-12,49%*	-16,18%**	-17,00%**	-7,45%**	-9,14%**
4	-1,69%	5,41%	4,30%	3,53%	4,56%	4,16%	2,55%	4,59%
5	1,22%	-0,40%	0,93%	-1,95%	0,17%	1,38%	-0,73%	-0,95%
6	-1,45%	5,47%	0,30%	-0,74%	-0,25%	-2,36%	0,25%	-0,57%
7	-0,24%	-4,86%	1,60%	1,89%	-0,66%	3,14%	2,30%	1,74%
8	6,19%**	-1,52%	2,51%	8,25%	5,19%	5,08%**	3,79%	5,26%
9	-3,36%	-5,09%	-1,17%	-4,96%	-3,78%	-1,63%	-3,65%	-3,63%
10	-0,34%	-0,04%	0,76%	0,80%	0,78%	3,46%	0,52%	1,14%

Notes: The table reports the abnormal returns for the companies for day t = -10 to day t = +10. The sample consists of a total 8 firms from the Moscow stock exchange. Gazprom PAO (GAZP), Rosneft (ROSN), Lukoil (LKOH), Gazprom Neft (SIBN), Surgut-pref (SNGS_p), Surgut (SNGS), Tatneft-3 (TATN), Tatneft Pref (TATN_p). The market model is considered for the normal returns. Event time is measured in days relative to the announcement date. * Significant at the 10% level (two-tail test) ** Significant at the 5% level (two-tail test).

Figure 1 highlights the cumulative abnormal returns of the 8 companies used in our sample. As stated before, this shows a significant picture of the negative effect of the mobilization on energy companies in Russia, with considerable drops in value on the day of the event, till day 7, when a small reversal can be observed. This shows the important consequence of political decisions and the significant event of a civilian mobilization of troops.

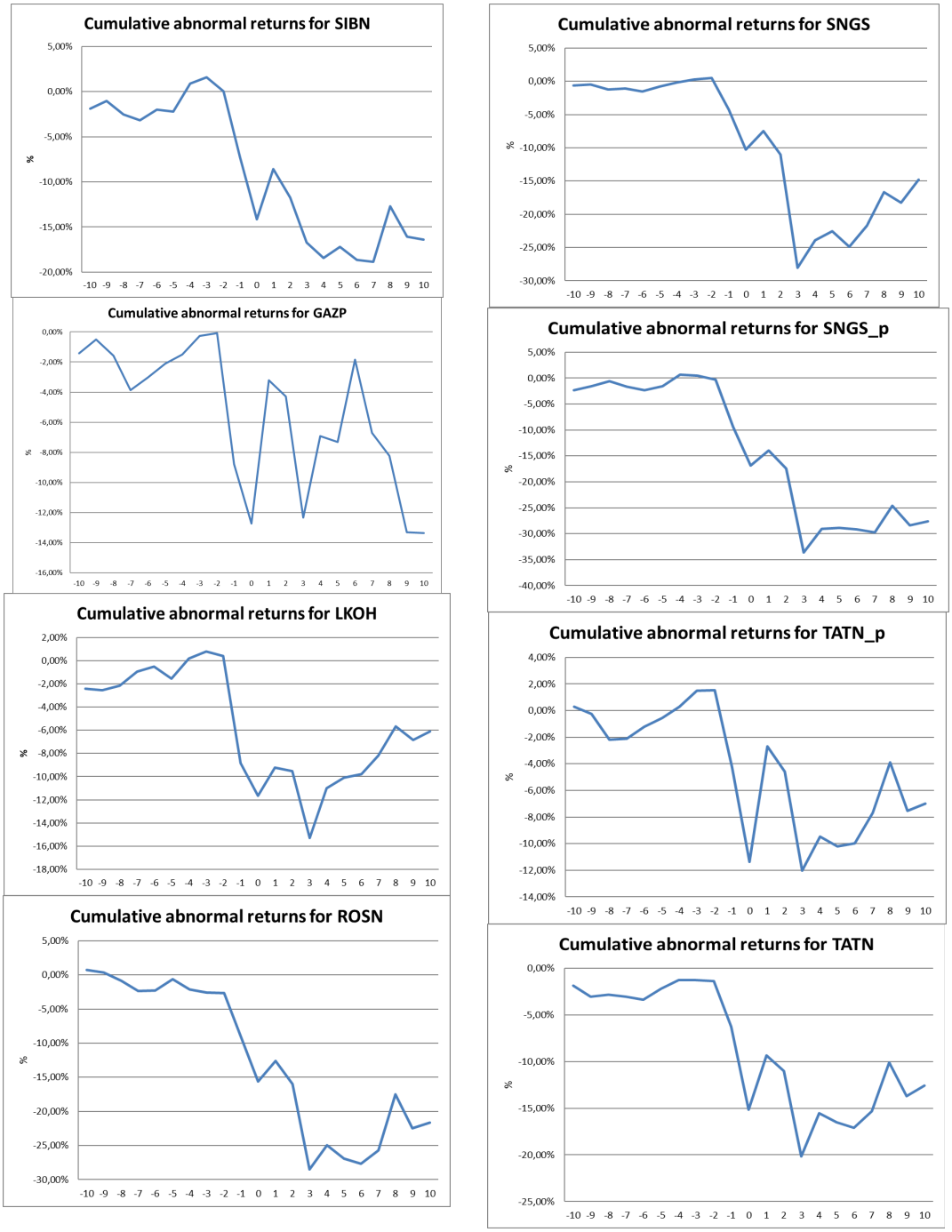

Fig. 1. *Cumulative abnormal returns*

5. Conclusions

The energy sector has seen many changes in the past years after the coronavirus pandemic, which has reshaped the energy landscape and triggered high volatility as

Russia invaded Ukraine, with oil and gas stocks having lows and highs. The electricity sector was negatively impacted during the coronavirus disease (COVID-19), with considerable declines in consumption in the initial phase.

The paper has shown that the announcement of the partial mobilization of the Russian army on 21 September 2022 has had a negative effect on Russian oil and gas companies, with statistically significant values on the day of the event. Moreover, this negative effect was larger one day before the announcement, which can be correlated with a potential insider-trading event. The results show the riskier profile of the energy sector in relation to possible events like political decisions or declarations. The findings have important implications for policymakers, which have to take into account that words have significant meaning on the financial market and can lower the stock value of companies or certain sectors.

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