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Market reactions to unexpected political changes: evidence from advance emerging markets

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ABSTRACT

The main aim of this article is to assess the influence of change in Prime Minister on Polish stock market. Prime Minister Szydło resigned shortly after she survived the second vote of no confidence on December 8, 2017, and was replaced by Morawiecki, the Vice-Prime Minister and Minister of Finance, and a former CEO of a large bank.[1] Considering the aforementioned context, this study tests four hypotheses regarding the market reaction in terms of companies' shareholder structure. An event study analysis was performed to calculate cumulative abnormal returns, and regression models were estimated to test the hypotheses. The author finds significant negative price changes only for state-owned enterprises (SOEs) both directly and indirectly controlled by the government. I assume that this reaction in the case of SOEs was caused by the uncertainty related to the likely changes in the management.

1. Introduction

There is an unquestionable strong link between a country's politics and its economy. Apart from fundamental issues such as changes in the dynamics of the gross domestic product, inflation, or exchange rates, the impact of politics on the stock exchange is also significant. Each political change causes risk and impacts the capital markets (Kirikkaleli, 2020) with the market reaction often being negative (Mensi et al., 2016). This study focuses on an unprecedented event that happened in Poland on Friday, December 7, 2017, when the Polish Prime Minister Beata Szydło won the vote of no confidence in the government. However, she resigned on Saturday afternoon, December 8, 2017. On Monday, December 11, 2017, Mateusz Morawiecki, the then Deputy Prime Minister, was sworn in as the new Prime Minister.

This situation can be compared to the withdrawal of the United States (US) Senator James Jeffords from the Republican Party. Jayachandran (2006) measured the price response to the unexpected gain in control of the US Senate by the Democratic

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Party. Valuation of entities associated with the Party increased by 0.17%. The impact of politics is also studied by Levy and Yagil (2015), who showed that each time the polls indicated the assumption of power by a liberal president, the income rates on the stock market increased.

In both the studies, the initial part was based on the traditional event study methodology, as in the present study. Subsequently, the authors estimated regression models for cumulative abnormal return rates (CARs) using several different variables. A similar method is adopted in this study using variables that provide information about the type of company, its financial characteristics, officers connection, and ownership.

The results presented in the article indicate a reaction consistent with the hypothesis of information efficiency. It shows that significant price changes occurred only in state-owned enterprises (SOEs). Such enterprises have the highest risk of exposure to changes in company officers, which emerge as an outcome of the election and the reshuffling of the cabinet. This study's most important conclusion is the fact that the strongest market reaction appeared for directly controlled SOEs.

Given this context, the main contribution of this study lies in its detailed analysis of the market reaction to the unexpected change of the prime minister. The results show that this change led to uncertainty, similary to the Gulen and Ion (2016) paper. Following Chen et al. (2017), this study examines whether the market responses are different for SOEs and private companies. Similar studies are rare. Another important element of this study is the analysis of the capital market of Poland—a post-communist economy that has recently been reclassified as a mature economy.

The remainder of this paper is organized into five sections. Section 2 presents an economic overview. Section 3 provides a review of the relevant literature and formulates the hypotheses. Section 4 describes and characterizes the dataset and methodology. Sections 5 and 6 provide research outcomes and discussions, respectively and section 7 concludes.

2. Economic overview

To gain a better understanding of the nature of the analyzed event, it is necessary to present a background on Poland's political situation. The centrist, conservative-liberal coalition government stepped down after two terms in office in 2015. The following elections were won by a conservative group with an economic orientation toward interventionism; the party could rule independently without a coalition partner as it had a majority in the Parliament and a party member as the president of the country. The change of the president led to discounting of assets by over 10% on the stock exchange for more than 6 months. The victory of Prawo i Sprawiedliwość (Law and Justice Party) in the parliamentary election[2] was followed by another quarter with a 16% drop in the value of assets on the stock exchange; this was accompanied by a decline of nearly 12% in the Polish Zloty's value. Additionally, the proposed policy style, economic reforms, and market reaction led Standard & Poor's to downgrade Poland's rating to BBB+.[3] Few months after the election, all mentioned values were back to the primary levels. This reaction corresponds to the evidence presented in the

study by Asongu and Nwachukwu (2018). Based on African markets, the authors prove that democratic regimes, especially economic democracy, enjoy financial market boom and autocratic regimes lead to market recession.

When Prime Minister Beata Szydło resigned, she was replaced by Mateusz Morawiecki, the then Minister of Finance and former CEO of a large bank. He was chosen for the position because he was perceived as being more pro-economy, and had a good reputation among Poles and economic commentators. Theoretically, the change should have triggered a positive reaction in the market (Blanchard, 1981; Croce et al., 2012).

3. Literature review and hypotheses development

When analyzing the literature in the context of the relationship between politics and the stock exchange, five basic research trends can be identified (Wisniewski, 2016). The first is the valuation of the relationship of political connections. The second focuses on the government's political orientation. A third important research area relates to political cycles, the impact of elections on capital markets, and the uncertainty associated with a new government. The fourth area covers events such as wars, international crises, terrorist attacks, and changes in leadership. The fifth focuses on changes in fiscal and monetary policy.

As part of the first trend, there is a body of literature on the market's reaction to companies having former and current politicians on their management boards. Faccio (2006) shows that companies with such connections generate higher rates of return. In countries with a strong military presence, affiliated companies generate significantly higher yields. For example, in Thailand, affiliated companies generated 160-percentage-points higher returns than non-affiliated companies (Bunkanwanicha & Wiwattanakantang, 2009), while in Indonesia, any deterioration in President Suharto's health resulted in statistically significant decreases in affiliated companies' prices (Fisman, 2001). Another research stream considers the fact that having a politician on the board of directors often comes with government subsidies, as demonstrated by Johnson and Mitton (2003) in their study on Malaysian companies. In their examination of the companies from the US and Europe, Shleifer and Vishny (1994) show that grants are given for meeting political objectives and vice versa—companies often express their willingness to pay a certain sum for evading participation in political projects.

Examining the influence of parliamentary elections on capital markets, a stream of research links election cycles to the activities of stock exchange entities and their stocks (Bertrand et al., 2018; Goldman et al., 2012). Both papers demonstrate how companies with political ties contribute toward increasing electoral opportunities of their political parties. Apart from these studies, a second trend shows that companies limit investments in pre-election periods (Julio and Yook, 2012, 2016). Several studies also address the impact of the political cycle on the rates of return; they indicate an overvaluation of assets during the first quarter of a new administration and a surge in yields—as high as 24%—during the second quarter (Huang, 1985). Similar results are presented by Wong and McAleer (2009) and Kräussl et al. (2014). Gärtner and

Wellershoff's (1995) analysis of US companies during 1961–1992 shows the presence of this pattern in the US since the 1960s. This reaction may be attributed to the time needed by a new administration to introduce reforms and the uncertainty associated with its implementation (Gulen & Ion, 2016; Luo et al., 2017). The change in the law on corruption was also pointed out in the study by Dimic et al. (2015) as one of the most important components of political risk. Chen et al. (2018) and Hillier and Loncan (2019) also analyzed the corruption aspect. They showed that providing information on the conversation between the president and a prominent businessman resulted in a nearly 10% decline in the value of the main index on the San Paulo stock exchange.

These stock market uncertainties also emerge from geopolitical events, like Brexit. Few studies recently published have exploited this event. Tielmann and Schiereck (2017) found an overall negative effect of the Brexit referendum on the value of European logistics companies. Schiereck et al. (2016) established that the reaction of banks' stock prices to the Brexit announcement was more severe than the response to Lehman's bankruptcy, while the reaction of the credit default swap market was far more subdued. Jackowicz et al. (2017) indicate the absence of a fundamental proof of a reaction on the Warsaw Stock Exchange (WSE).

Political change leads to a change in fiscal, and at times, monetary policies also (Blanchard, 1981). Left-wing governments tend to strengthen the state's influence on the economy, which will increase taxation, budgetary expenditures, and debt, consequently increasing the risk of investment and cost of capital (Croce et al., 2012). Right-wing governments typically develop a more expansionary monetary policy by lowering interest rates and increasing the money base (Darrat, 1988; Thorbecke, 1997). Moreover, elections also have an impact on tax and economic policies. Krol (2014) proved that economic policy uncertainty increases the exchange rate volatility. The election of US President Trump had a negative impact on US companies with significant foreign exposure (Wagner et al., 2018). Jayachandran (2006) measured the price response to the unexpected gain in control of the US Senate by the Democratic Party. The total change in market capitalization of entities supporting the Republican Party caused by the event was nearly US$1,000 billion. Based on these studies and the reception of the public opinion of the new prime minister, the author proposes the following hypothesis:

> Hypothesis 1: The change of the prime minister leads to a greater increase in prices on the WSE than in the Morgan Stanley Capital International Emerging Markets Index.

Moreover, the strength of the price impact of these events may depend on a firm's ownership structure. Chen et al. (2017) find that the relationship between the primary market index and firm value is negative. Wang (2015) finds that the value effects of political connections depend on the firm's ownership. Chinese listed private firms with a large fraction of politically connected independent directors outperform their non-connected counterparts. In contrast, politically connected independent directors fail to add value to SOEs. Based on these studies, the next hypothesis is proposed as follows:

> Hypothesis 2: The change of the prime minister leads to an increase in the prices of SOEs.

It is also worth noting that political connections could also have various forms (Jackowicz, 2013). Faccio (2006) and Johnson and Mitton (2003), among others, analyze the relationship by having a politically exposed person as a company officer. Shleifer and Vishny (1994) show that political connections help companies to meet political objectives and get benefits from the government. Chen et al. (2017) and Wang (2015) also focus, according to Hypothesis 2, on shareholder ownership. Carretta et al. (2012) show the possibility of direct and indirect political connections. Therefore, the next two hypotheses verify the sample concerning the form of state control:

> *Hypothesis 3: The change of the prime minister leads to an increase in the prices of directly controlled SOEs.*

> *Hypothesis 4: The change of the prime minister leads to an increase in the prices of indirectly controlled SOEs.*

4. Dataset and methodology

The analysis uses 376 companies listed on the main index of the WSE. The sample was divided based on ownership, according to the methodology used by Chen et al. (2017). In their research for Chinese market, they define an SOE as a company that has a state government stake. In my sample, capital structures are more complicated because there are two types of SOEs: those directly controlled by the State Treasury and those controlled through different SOEs. For this study, direct SOEs are classified as those in which the state government's share is above 5%. The sample comprises 2 cases with government ownership exceeding 5% and 14 cases with ownership exceeding 30%. A similar definition was adopted for indirect SOEs or companies with entities directly controlled by the government in the shareholding structure. In practice, a share of up to 5% allows a minister to have a significant impact on the company's operations. Based on these definitions, this study considers 4 subsamples, with 376, 16, 26, and 12 firms in the first, second, third, and final subsamples, respectively (Figure A1).

Hypothesis testing was conducted using the event study methodology and regression analysis. The first step of research included estimation of the CAR for each company using a market model, wherein the parameters were estimated using ordinary least squares (OLS). The return rates were expressed as natural logarithms. A 250-day estimation window was taken as an approximation of the financial year, beginning 310 days before the event and ending 60 days before the event. This window eliminated the possibility of the market anticipating the event. The event window covered a 21-day period—10 days before the event to 10 days after the event (Figure A2).

In the second part of this research, a multivariate approach is used wherein the CARs are regressed against a set of explanatory variables. The OLS regressions, with robust standard errors, are estimated separately for each of the three forms of control. Based on the OLS regression, the following is obtained:

$$\mathrm{CAR}_i^{t_1, t_2} = f(\textit{Firm},\ \textit{Fin Firm},\ \textit{Ownership}) \tag{1}$$

where the dependent variable, $CAR_i^{t_1, t_2}$, is the CAR for the firm calculated over the $< t_1, t_2 >$ event window. The explanatory variables are grouped into three types. The first type is denoted by Firm, which provides information about the characteristics of a firm affected by the CAR. The variables within this type are Freefloat, TAT, ROE, Ln Revenues, Property to assets, and P/BV. The second type has only one variable, Fin firm, which controls the industrial specificity of a firm, as it takes the value of 1 for financial firms and 0 otherwise. Comprising binary variables SOE, direct SOE, or indirect SOE, the last type of variables describes a firm's ownership structure: the direct SOE variable identifies firms with at least 5% government share.

Table A1 summarizes the definitions of all dependent and explanatory variables in the study, while Table A2 presents the descriptive statistics of different CARs in the first part. The table further shows that the FIRM-type variables have similar values in each subsample. The most critical differential parameter is the ownership type.

5. Results

Table A3 presents the results of the univariate analysis for the first research subsample, which includes all companies listed on the WSE. The empirical return rates' column presents the event window return rates and shows a small adjustment in prices on the event day. The analysis of individual event windows within the cumulated abnormal returns rates (CAR) shows long-term corrections with statistical significance only for the window $<-10; 10>$ and $<0; 10>$ (Table A3, Chart A1). Therefore, hypothesis 1 is not supported.

The results presented in Table A4 show a negative reaction in the group of 26 direct and indirect SOEs. The abnormal return rate on day 0 is close to -1% and is statistically significant at the 10% level. Additionally, permanent declines in the CARs are visible—abnormal returns rate decrease each day after the event day to day number 10 by 0.325%. The CARs for windows $<-3; 3>$, $<-2; 2>$, and $<0; 2>$ are also statistically significant. The analysis in Chart A2 shows fluctuations in CARs. On the one hand, this indicates market participants' negative perception about the change of the prime minister. However, subsequently, the alternating increase and decrease in the share price show that the fluctuations are more a result of a behavioral rather than a fundamental reaction.

The analysis of the 16-firm sample of direct SOEs showed a statistically significant correction on the day of the event (Table A5, Chart A3). The CAR for the window -10 to 10, which showed a price correction of more than 4%, is important. The CAR for windows $<-3; 3>$ and $<0; 2>$ are also negative and statistically significant. The CAR for windows after the event shows a price decrease in $<0; 10>$ of over 3 percentage points. However, as previously noted, it declines by 1.13% on the event day. This reaction indicates that the change of the prime minister triggered a negative market reaction, and hence, Hypothesis 3 is not supported. The new head of the government was considered to be more pro-economy, which may have triggered behavioral reactions, such as uncertainty or aversion to change. This can also be explained by the expected risk of changes in companies' management boards.

A weaker reaction in the case of these companies makes it necessary to conduct another analysis only for indirect SOEs. There is no significant market reaction after the event day. As presented in Table A6, the CAR is negative for the window <–10; 10> only, at 2.19 percentage points and not statistically significant. For the window <–5; 5>, the CAR has a p-value at the 10% level, and is equal to 2.3% for the <–2; 2> window. The biggest drops in CAR, by more than 1 percentage point, are noted on days 0, 2, and 6. Chart A4 provides an additional illustration of systematic CAR decline. Therefore, Hypothesis 4 is not confirmed, while the support for Hypothesis 3 may be attributed to the changes in the stock price of direct SOEs.

The next stage of the research is a multivariate analysis aimed at checking whether the ownership factor led to abnormal rates of return. The analysis confirms the conclusions of the univariate analysis. Companies from the second subsample, that is, SOEs (Table A7), reacted negatively to the change of the prime minister; the variable representing this type of capital ties is characterized by statistically significant, negative coefficients. In the case of the models for the entire sample of 342 entities, the coefficient of the SOE variable was characterized by statistical significance. After excluding financial entities from the sample, that is, in the analysis of 277 entities, the parameter for the SOE variable obtained a p-value of less than 10% in four out of six models. The binary variable encoding enterprises directly controlled by the State Treasury (Table A8) indicates a strong negative impact of the event in the three windows <–1; 1>, <–2; 2>, and <0; 2>. The negative reaction is not limited to companies directly controlled by the State Treasury; the coefficients of the indirectly controlled SOE variable (Table A9) are also negative and statistically significant. Indirectly controlled SOEs are mainly characterized by negative coefficients of the indirect SOE variable for windows starting from day –2.

The results of the multivariate regression model estimation presented in Table A7 consistently indicate a negative market reaction for SOEs. In the <–1; 1> window, for the whole sample, coefficients obtained for ROE, natural logarithm from revenues, and binary variables for the type of entity, not mentioning the constant, are all statistically significant. The ROE variable, with a p-value below 10%, is present in the other three models; this variable is always accompanied by a negative value of the parameter. Other variables with statistical significance have low coefficients in terms of absolute value. It is also worth referring to the model for the window <0; 1> for all companies. In this case, all the variables are statistically significant. Wald's tests indicate the statistical significance of models for windows <–1; 1>, <0; 1>, and <–2; 2>.

The multivariate models presented in Table A8 illustrate a consistently negative market reaction for companies controlled directly by the State Treasury. However, in the case of the binary variable, direct SOEs, a negative, statistically significant reaction occurs for windows covering two days after the event. This finding confirms the results obtained from the univariate analysis, that is, the change of the prime minister had a negative impact on these companies on the day of the event, which was sustained even after the event. It is difficult to see a different pattern in the particular models other than the impact of control over the company on CAR. The ratio for the ROE variable is negative and statistically significant only in the windows <–1; 1>

and <–2; 0>. The coefficient of the binary variable denoting financial entities is statistically significant only in the <–1; 1> window. The coefficient of the variable calculated as a natural logarithm of income is statistically significant and has a value close to zero. Wald's tests indicate the statistical significance of models for windows <–1; 1>, <0; 1>, and <–2; 2>.

The third set of multivariate models analyzing the sample in terms of the variable denoting companies indirectly controlled by the State Treasury (Table A9) also show a negative market reaction. However, in the case of the coefficient of the binary variable, indirect SOEs, the negative and statistically significant reaction is seen mainly for windows covering day –2. The result for the window <–2; 2> confirms the results obtained from the univariate analysis; it reminds that only this window was characterized by statistically significant CARs. Similarly, for models with a binary variable encoding companies controlled directly by the State Treasury, the ROE variable is negative and statistically significant only in windows <–1; 1> and <–2; 0>; the binary variable encoding financial entities is statistically significant only in window <–1; 1>. Therefore, it can be concluded that the negative reaction is not limited to companies directly controlled by the State Treasury. However, improved levels of static relevance of CARs and the reaction in the <0; 2> window indicate that in the long-run, the market discounted the change in the case of companies directly controlled by the State Treasury. Wald's tests indicate the statistical significance of the models for the window <–1; 1>.

6. Discussion

Even a small political change causes risk and impacts the capital markets (Kirikkaleli, 2020). The stock market reaction depends on views involving the office, the shock causing irrational behavior of investors, and herd behavior. However, often investors act rationally, differentiating their behavior towards types of entities and their exposure to new situations, as demonstrated by this study. Only companies that were directly exposed to political risk registered a significant reaction.

The direction of this reaction is aligned with the findings of Asongu and Nwachukwu (2018), who prove that democratic regimes, especially economic democracy, enjoy financial market boom and autocratic regimes lead to the market recession. Mensi et al. (2016), also show that market reaction is adverse. This study supports this statement—stock prices of all the SOEs dropped on the event day.

These adverse reactions can be explained by the fact that the SOEs usually try to meet the government objectives. Shleifer and Vishny (1994) show that this can result in getting benefits from the government. In this study, it was demonstrated that SOE serve government objectives, such as banks renationalization and steering of the energy prices. However, this goal of SOE activities should be confirmed in future research based on wider sample.

Moreover, the value effects of political connections depend on the firm's ownership (Wang, 2015). For this reason, the sample was divided into four subsamples based on the work of Carretta et al. (2012). The market response was most visible in the case of direct SOE. However, the market response was not limited to these

entities only. The multivariate models prove that the indirect SOE factor strongly affects the analyzed entities negatively.

7. Conclusions

In terms of verifying the impact of the change of the prime minister on companies, the results presented indicate a reaction consistent with the hypothesis of information efficiency; significant price changes were found only for SOEs, based on the univariate and multivariate models. The CAR analysis shows that the reaction is stronger in the case of direct SOEs. This finding is also confirmed in the regression models. The negative reaction is not limited to companies directly controlled by the State Treasury; the coefficients of the indirectly controlled SOE variable are also negative and statistically significant. Despite the fact the hypotheses suggested an expected price increase due to the new prime minister's profile, the market response was negative, unlike the increase in stock prices after Donald Trump's election (Shaikh, 2017; Wagner et al., 2018). This can be attributed to the uncertainty regarding the new administration's reforms (Gulen & Ion, 2016; Luo et al., 2017). However, the results can also be explained based on risk aversion connected with the expected risk of changes in companies' management boards. Such changes could lead to a change in companies' management style. The continuation of the downward trend after the event depicts the negative change in the CAR analysis chart.

The major limitation of this research is single country evidence. Following Dimic et al. (2015), who show that market reactions to political risk is higher in advanced emerging and emerging economies. Further research should compare unexpected changes in a bigger sample of countries and different types of economies. Based on Rozeff and Kinney (1976) research, I should also separate month anomaly, but the study by Podgórski (2018) proves that this anomaly does not exist on the WSE. Faccio (2004, 2006) and Jackowicz (2013) also provide evidence on the impact of personal connections, which could be an essential aspect, and hence, an important area of future research.

Notes

1. https://www.bloomberg.com/news/articles/2017-12-07/polish-ruling-party-picks-finance-minister-to-become-new-premier [Available 30.03.2020]
2. https://www.bloomberg.com/news/articles/2015-10-25/poland-ousts-government-as-law-justice-gains-historic-majority
3. https://www.reuters.com/article/poland-ratings-sp-idUSL3N14Z532

Disclosure statement

No potential conflict of interest was reported by the authors.

Data availability statement

The data that support the findings of this study are available from Refinitiv Thomson Reuters - date base Eikon. Restrictions apply to the availability of these data, which were used under

license for this study. Data are available from the authors with the permission of Refinitiv Thomson Reuters.

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Appendix

Chart A1. Cumulated abnormal return rate subsample I. *Source:* Own Calculations based on the data form the Thomson Reuters Eikon.
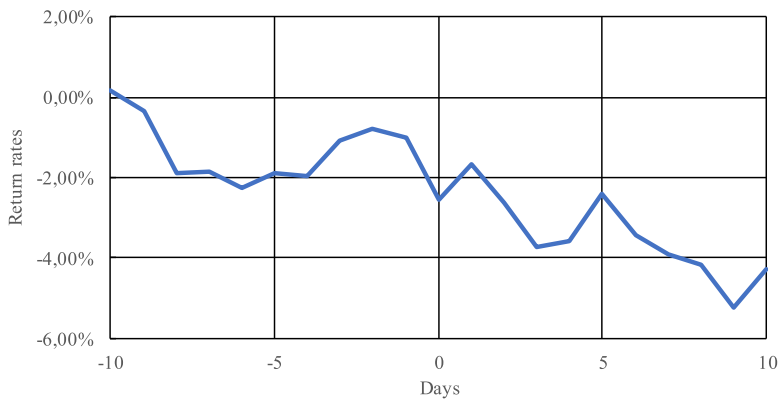
Chart A2. Cumulated abnormal return rate subsample II. *Source:* Own Calculations based on the data form the Thomson Reuters Eikon.
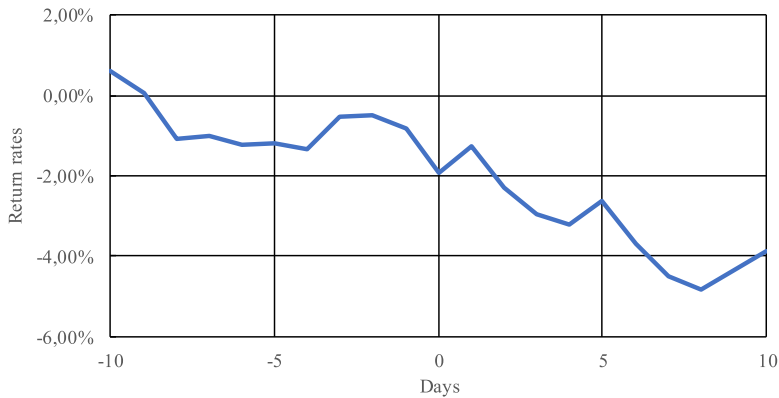
Chart A3. Cumulated abnormal return rate subsample III. *Source:* Own Calculations based on the data form the Thomson Reuters Eikon.
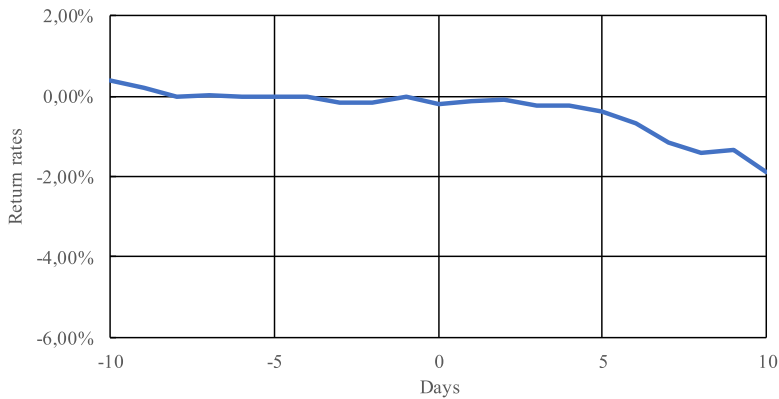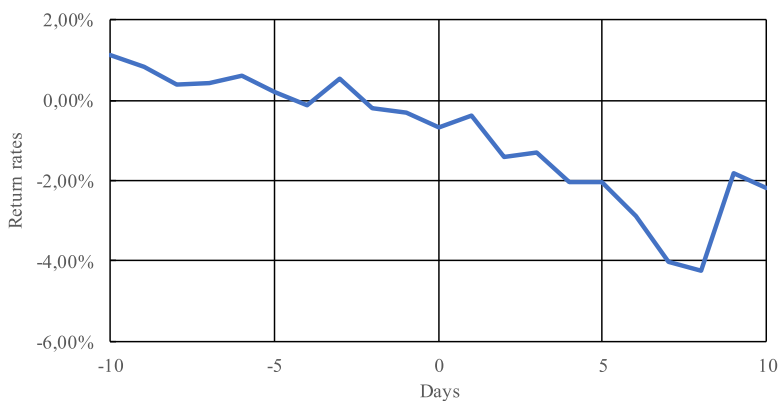
Chart A4. Cumulated abnormal return rate subsample IV. *Source:* Own Calculations based on the data form the Thomson Reuters Eikon.
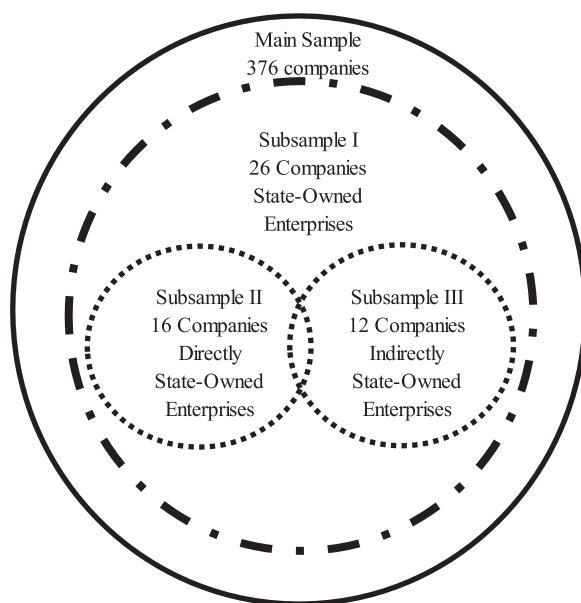
Figure A1. Construction of the sample and subsamples. *Source:* Own work.
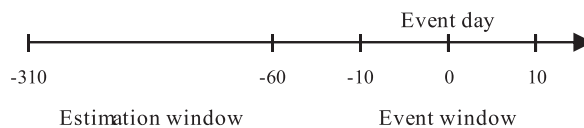
Figure A2. Estimation and event window timeline. *Source:* Own work.

Table A1. Variable definitions.

Panel A. Event characteristics	
$CAR^{[-1,1]}$, $CAR^{[-1,0]}$, $CAR^{[0,1]}$, $CAR^{[-2,2]}$, $CAR^{[-2,0]}$, $CAR^{[0,2]}$	Cumulative abnormal return in the $[-1,1]$, $[-1,0]$, $[0,1]$, $[-2,2]$, $[-2,0]$, or $[0,2]$ event window, respectively
Panel B. Firm characteristics	
Fin firm	Binary variable taking a value of 1 for financial firms and 0 otherwise
Freefloat[a]	Free float
TAT[a]	Total assets turnover
ROE[a]	Return on equity
Ln Revenues[a]	Natural logarithm of a revenues
Property to assets[a]	Property, plant, and equipment to total assets
P/BV[a]	Price to book value
SOE	Binary variable taking a value of 1 for firms with at least 5% government share in the ownership structure, and 0 otherwise
Direct SOE	Binary variable taking a value of 1 for firms with at least 5% direct government share in the ownership structure, and 0 otherwise
Indirect SOE	Binary variable taking a value of 1 for firms with at least 5% indirect government share in the ownership structure and 0 otherwise

[a]At the beginning of the year preceding the event year.
Source: Own Calculations based on the data form the Thomson Reuters Eikon.

Table A2. Descriptive statistics.

		CAR						Freefloat	TAT	ROE	Ln Revenues	Property to assets	P/BV
		<-1,1>	<-1,0>	<0,1>	<-2,2>	<-2,0>	<0,2>						
All	Mean	-0.0008	-0.0019	-0.0008	-0.0003	-0.0024	0.0002	48.1035	1.0382	0.0706	19.5907	0.2450	1.3684
	Std. Dev.	0.0359	0.0324	0.0286	0.0457	0.0367	0.0346	23.7538	0.8584	0.3279	1.9316	0.2149	2.0429
	Min	-0.1343	-0.1339	-0.0963	-0.1920	-0.1977	-0.1084	10.3786	0.0162	-3.9432	13.6743	0.0001	-4.3935
	1st quart.	-0.0174	-0.0156	-0.0154	-0.0217	-0.0186	-0.0172	31.2757	0.5005	0.0219	18.4449	0.0384	0.4942
	Median	-0.0022	-0.0034	-0.0005	-0.0019	-0.0049	-0.0011	43.2607	0.9309	0.0840	19.4047	0.1947	0.8600
	3rd quart.	0.0131	0.0086	0.0095	0.0159	0.0116	0.0148	62.5492	1.3891	0.1522	20.6463	0.4139	1.4807
	Max	0.1445	0.1969	0.1335	0.2188	0.1522	0.1918	100.0000	6.2782	1.3890	28.9983	0.7918	20.3672
SOE	Mean	-0.0078	-0.0145	-0.0046	-0.0177	-0.0141	-0.0150	49.3193	0.6285	0.0453	21.6426	0.3693	0.9479
	Std. Dev.	0.0320	0.0298	0.0288	0.0343	0.0331	0.0292	18.5113	0.4848	0.2123	2.0740	0.2853	0.6129
	Min	-0.1051	-0.1043	-0.0931	-0.1029	-0.1257	-0.0966	20.1794	0.0288	-0.9190	18.4661	0.0040	0.1699
	1st quart.	-0.0198	-0.0208	-0.0183	-0.0301	-0.0185	-0.0315	30.4858	0.1906	0.0216	19.4914	0.0390	0.3724
	Median	-0.0061	-0.0093	0.0013	-0.0123	-0.0092	-0.0115	48.4877	0.5567	0.0871	22.0586	0.4764	0.9350
	3rd quart.	0.0129	0.0008	0.0160	0.0031	0.0002	0.0064	66.6956	0.9663	0.1067	23.2341	0.6052	1.2598
	Max	0.0422	0.0358	0.0380	0.0285	0.0355	0.0278	81.4404	1.6439	0.2268	25.1978	0.7918	2.4686
Direct SOE	Mean	-0.0090	-0.0176	-0.0066	-0.0154	-0.0145	-0.0161	48.1002	0.5710	0.1025	22.4526	0.4208	0.9014
	Std. Dev.	0.0365	0.0361	0.0315	0.0387	0.0414	0.0304	16.5270	0.4615	0.0668	1.9575	0.2932	0.6517
	Min	-0.1051	-0.1043	-0.0931	-0.1029	-0.1257	-0.0966	20.1794	0.0288	-0.0111	18.9188	0.0040	0.1699
	1st quart.	-0.0155	-0.0230	-0.0167	-0.0233	-0.0179	-0.0296	30.9675	0.2364	0.0728	21.3039	0.0833	0.3156
	Median	-0.0026	-0.0069	0.0024	-0.0043	-0.0077	-0.0064	48.0010	0.5337	0.0928	23.0907	0.5288	0.8790
	3rd quart.	0.0138	0.0010	0.0120	0.0049	0.0038	0.0009	65.2062	0.7567	0.1257	23.7436	0.6544	1.1969
	Max	0.0367	0.0358	0.0262	0.0285	0.0355	0.0186	68.6075	1.6017	0.2268	25.1978	0.7918	2.4686
Indirect SOE	Mean	-0.0019	-0.0050	-0.0007	-0.0194	-0.0122	-0.0110	46.8199	0.7290	-0.0208	20.3512	0.3176	0.9719
	Std. Dev.	0.0258	0.0195	0.0229	0.0255	0.0131	0.0265	22.6324	0.5268	0.2959	1.5419	0.2585	0.5451
	Min	-0.0432	-0.0370	-0.0447	-0.0592	-0.0358	-0.0454	20.1794	0.0429	-0.9190	18.4661	0.0045	0.3405
	1st quart.	-0.0200	-0.0130	-0.0082	-0.0339	-0.0177	-0.0330	26.7389	0.2430	-0.0253	19.2417	0.0788	0.5421
	Median	-0.0043	-0.0068	0.0011	-0.0213	-0.0102	-0.0079	47.1419	0.7271	0.0449	19.5102	0.3580	0.9964
	3rd quart.	0.0133	0.0019	0.0094	-0.0044	-0.0024	0.0098	67.0174	1.1339	0.1066	21.7289	0.5040	1.2287
	Max	0.0422	0.0358	0.0380	0.0246	0.0045	0.0278	81.4404	1.6439	0.2164	22.7448	0.7327	1.9115

This table presents the descriptive statistics for all the subsamples. In first part, columns from 3 to 8, different CARs value. In second part, columns from 9 to 14, FIRM variables.
Source: Own Calculations based on the data form the Thomson Reuters Eikon.

Table A3. Cumulated abnormal returns for subsample one: All listed companies of the WSE.

Window	CAR	Window	CAR
<−10;10>	−1.9061%*	<0>	−0.1626%
<−5;5>	−0.3927%	<0;1>	−0.1199%
<−2;2>	0.0740%	<0;2>	−0.0839%
<−1;1>	0.0374%	<0;3>	−0.2251%
<−5; −1>	−0.0247%	<0;5>	−0.3680%
<−2; −1>	0.1579%	<0;10>	−1.8803%***

This table presents the results of CARs for different event windows. The left part of the table presents windows consisting of the event day and CAR before the event day. The right part of table presents AR change after the event.
Note: ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.
Source: Own Calculations based on the data form the Thomson Reuters Eikon.

Table A4. Cumulated abnormal returns for subsample two: State Owned Enterprises listed on the WSE.

Window	CAR	Window	CAR
<−10;10>	−4.2750%*	<0>	−1.5232%*
<−5;5>	−0.1207%	<0; 1>	−0.6609%
<−2;2>	−1.5444%	<0; 2>	−1.6146%*
<−1;1>	−0.8977%	<0; 3>	−2.7201%**
<−5; −1>	1.2521%	<0; 5>	−1.3728%
<−2; −1>	0.0702%	<0; 10>	−3.2521%*

This table presents the results of CARs for different event windows. The left part of the table presents windows consisting of the event day and CAR before the event day. The right part of table presents AR change after the event.
Source: Own Calculations based on the data form the Thomson Reuters Eikon.

Table A5. Cumulated abnormal returns for subsample three: Direct SOEs listed on the WSE.

Window	CAR	Window	CAR
<−10; 10>	−3.8761%**	<0>	−1.1329%**
<−5; 5>	−1.3780%	<0; 1>	−0.4623%
<−2; 2>	−1.7740%***	<0; 2>	−1.4990%**
<−1; 1>	−0.7822%	<0; 3>	−2.1349%**
<−5; −1>	0.4273%	<0; 5>	−1.8052%*
<−2; −1>	−0.2750%	<0; 10>	−3.0597%*

This table presents the results of CARs for different event windows. The left part of the table presents windows consisting of the event day and CAR before the event day. The right part of table presents AR change after the event.
Source: Own Calculations based on the data form the Thomson Reuters Eikon.

Table A6. Cumulated abnormal returns for subsample four: Indirect SOEs listed on the WSE.

Window	CAR	Window	CAR
<−10; 10>	−2.1995%	<0>	−0.3830%
<−5; 5>	−2.6490%*	<0; 1>	−0.0699%
<−2; 2>	−1.9378%**	<0; 2>	−1.0967%
<−1; 1>	−0.1863%	<0; 3>	−1.0021%
<−5; −1>	−0.9150%	<0; 5>	−1.7340%
<−2; −1>	−0.8411%	<0; 10>	−1.8862%

This table presents the results of CARs for different event windows. The left part of the table presents windows consisting of the event day and CAR before the event day. The right part of table presents AR change after the event.
Source: Own Calculations based on the data form the Thomson Reuters Eikon.

Table A7. Multivariate models for market reaction to the change of the prime minister with state owned enterprise variable.

	All firms CAR <-1;+1>	Non-financial CAR <-1;+1>	All firms CAR <-1;0>	Non-financial CAR <-1;0>	All firms CAR <0;1>	Non-financial CAR <0;1>	All firms CAR <-2;2>	Non-financial CAR <-2;2>	All firms CAR <-2;0>	Non-financial CAR <-2;0>	All firms CAR <0;2>	Non-financial CAR <0;2>
Constant	-0.04266 *	-0.01893	-0.00786	0.01651	-0.02975 ***	-0.01224	-0.04010	-0.03784	-0.01145	0.00172	-0.02359	-0.01635
	(0.02426)	(0.02860)	(0.02271)	(0.02483)	(-1.79000)	(0.02111)	(0.02802)	(0.03427)	(0.02454)	(0.02998)	(0.02072)	(0.02408)
Financials	0.01192 **	0.00347	0.00692 ***	0.00557	-0.00112	0.00517						
	(0.00536)	(0.00439)	(1.76000)	(0.00635)	(0.00488)	(0.00517)						
Freefloat	0.00000	-0.00001	-0.00006	0.00000	0.00005 ***	0.00003	-0.00005	-0.00005	-0.00006	-0.00003	0.00000	-0.00005
	(0.00009)	(0.00010)	(0.00008)	(0.00000)	(0.70300)	(0.00007)	(0.00011)	(0.00012)	(0.00010)	(0.00011)	(0.00007)	(0.00008)
TAT	-0.00092	0.00039	-0.00078	-0.00031	0.00110	-0.00088						
	(0.00229)	(0.00210)	(0.00224)	(0.00295)	(0.00270)	(0.00305)						
ROE	-0.01996*	-0.01421*	-0.00867	-0.01197	-0.01373**	-0.00480	-0.02112	-0.01337	-0.01480**	-0.01360	-0.00877	-0.00233
	(0.01150)	(0.00799)	(0.00553)	(0.00934)	(-2.87000)	(0.00548)	(0.01633)	(0.01392)	(0.00593)	(0.01099)	(0.01469)	(0.00719)
Ln Revenues	0.00209*	0.00108	0.00052	-0.00056	0.00136***	0.00061	0.00222	0.00234	0.00078	-0.00004	0.00123	0.00133
	(0.00124)	(0.00152)	(0.00114)	(0.00128)	(1.62000)	(0.00108)	(0.00145)	(0.00178)	(0.00128)	(0.00157)	(0.00104)	(0.00123)
Property to assets	-0.00647	-0.00658	-0.00299	-0.01481	0.00096	-0.01887**						
	(0.00995)	(0.01007)	(0.00759)	(0.01414)	(0.01144)	(0.00938)						
P/BV	0.00081	0.00018	-0.00036	-0.00064	0.00032***	-0.00031	0.00075	0.00029	-0.00053	-0.00069	0.00044	-0.00015
	(0.00141)	(0.00134)	(0.00143)	(0.00145)	(0.41600)	(0.00072)	(0.00118)	(0.00118)	(0.00184)	(0.00193)	(0.00070)	(0.00073)
SOE	-0.01299*	-0.01238	-0.01533**	-0.01494**	-0.00775***	-0.00810	-0.02426***	-0.02544***	-0.01492**	-0.01557*	-0.01943***	-0.02052***
	(0.00681)	(0.00804)	(0.00624)	(0.00756)	(-1.27000)	(0.00727)	(0.00729)	(0.00873)	(0.00662)	(0.00829)	(0.00656)	(0.00788)
R square	0.058765	0.019059	0.025444	0.035399	0.041362	0.009554	0.041962	0.029761	0.030857	0.023632	0.028933	0.037641
Observations	342	277	342	277	342	277	342	277	342	277	342	277

The table presents the OLS estimates for the sample of all firms or non–financial firms only. Robust standard errors at the firm level are reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.
Source: Own Calculations based on the data form the Thomson Reuters Eikon.

Table A8. Multivariate models for market reaction to the change of the prime minister with direct state owned enterprise variable.

	All firms CAR <-1,+1>	Non-financial CAR <-1,+1>	All firms CAR <-1,0>	Non-financial CAR <-1,0>	All firms CAR <0,1>	Non-financial CAR <0,1>	All firms CAR <-2,2>	Non-financial CAR <-2,2>	All firms CAR <-2,0>	Non-financial CAR <-2,0>	All firms CAR <0,2>	Non-financial CAR <0,2>
Constant	-0.04242*	-0.01604	-0.00827	0.01681	-0.03056	-0.01275	-0.03565	-0.03208	-0.00971	0.00303	-0.02236	-0.01500
	0.02443	0.02903	0.02283	0.02515	0.01886	0.02077	0.02796	0.03476	0.02436	0.02965	0.02055	0.02429
Financials	0.01193***		0.00352		0.00698		0.00543		-0.00116		0.00516	
	0.00536		0.00438		0.00487		0.00636		0.00490		0.00517	
Freefloat	0.00000	-0.00002	-0.00006	-0.00008	0.00004	0.00003	-0.00005	-0.00005	-0.00006	-0.00003	0.00000	-0.00005
	0.00009	0.00010	0.00008	0.00010	0.00006	0.00007	0.00011	0.00012	0.00010	0.00011	0.00007	0.00008
TAT		-0.00070		0.00049		-0.00077		0.00014		0.00125		-0.00069
		0.00228		0.00210		0.00224		0.00294		0.00271		0.00304
ROE	-0.01953	-0.01346*	-0.00816	-0.01100	-0.01346	-0.00426	-0.02036	-0.01181	-0.01432**	-0.01260	-0.00813	-0.00101
	0.01184	0.00797	0.00526	0.00946	0.01620	0.00527	0.01707	0.01404	0.00618	0.01099	0.01525	0.00717
Ln Revenues	0.00207*	0.00091	0.00053	-0.00060	0.00139	0.00063	0.00195	0.00200	0.00067	-0.00012	0.00114	0.00124
	0.00125	0.00154	0.00114	0.00128	0.00095	0.00106	0.00144	0.00180	0.00127	0.00155	0.00104	0.00124
Property to assets		-0.00749		-0.00722		-0.00321		-0.01688		0.00011		-0.01993**
		0.01011		0.01026		0.00767		0.01436		0.01156		0.00963
P/BV	0.00082	0.00019	-0.00036	-0.00063	0.00032	-0.00031	0.00080	0.00030	-0.00051	-0.00069	0.00046	-0.00015
	0.00141	0.00133	0.00143	0.00145	0.00090	0.00072	0.00118	0.00118	0.00184	0.00193	0.00071	0.00073
Direct SOE	-0.01451	-0.00911	-0.01821*	-0.01499	-0.01011	-0.00896	-0.02105**	-0.01893	-0.01446	-0.01437	-0.02040**	-0.01940*
	0.01037	0.01350	0.00969	0.01272	0.00856	0.01102	0.01062	0.01397	0.01059	0.01408	0.00856	0.01098
R square	0.056946	0.014071	0.023757	0.030553	0.041664	0.008081	0.032490	0.017921	0.026521	0.018602	0.022711	0.027998
Observations	342	277	342	277	342	277	342	277	342	277	342	277

The table presents the OLS estimates for the sample of all firms or non-financial firms only. Robust standard errors at the firm level are reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.
Source: Own Calculations based on the data form the Thomson Reuters Eikon.

Table A9. Multivariate models for market reaction to the change of the prime minister with indirect state owned enterprise variable

	All firms CAR <-1;+1>	Non-financial CAR <-1;+1>	All firms CAR <-1;0>	Non-financial CAR <-1;0>	All firms CAR <0;1>	Non-financial CAR <0;1>	All firms CAR <-2;2>	Non-financial CAR <-2;2>	All firms CAR <-2;0>	Non-financial CAR <-2;0>	All firms CAR <0;2>	Non-financial CAR <0;2>
Constant	-0.03323	-0.00898	0.00330	0.02862	-0.02407	-0.00569	-0.02407	-0.01773	-0.00142	0.01412	-0.01019	0.00005
	0.02390	0.02785	0.02301	0.02529	0.01893	0.02150	0.02800	0.03465	0.02517	0.03107	0.02066	0.02465
Financials	0.01149***		0.00298		0.00667		0.00472		-0.00163		0.00451	
	0.00538		0.00441		0.00485		0.00635		0.00488		0.00516	
Freefloat	0.00000	-0.00002	-0.00006	-0.00008	0.00005	0.00003	-0.00005	-0.00006	-0.00006	-0.00004	0.00000	-0.00006
	0.00009	0.00010	0.00008	0.00010	0.00006	0.00007	0.00011	0.00012	0.00010	0.00011	0.00007	0.00008
TAT		-0.00039		-0.00106		-0.00043		0.00066		0.00172		-0.00003
		0.00221		0.00205		0.00221		0.00287		0.00266		0.00300
ROE	-0.01973	-0.01398*	-0.00840	-0.01154	-0.01358	-0.00459	-0.02117	-0.01349	-0.01478**	-0.01353	-0.00864	-0.00211
	0.01199	0.00804	0.00524	0.00954	0.01639	0.00535	0.01677	0.01400	0.00609	0.01103	0.01523	0.00723
Ln Revenues	0.00156	0.00055	-0.00010	-0.00122	0.00104	0.00026	0.00135	0.00127	0.00023	-0.00070	0.00050	0.00046
	0.00121	0.00147	0.00115	0.00129	0.00095	0.00110	0.00143	0.00179	0.00130	0.00161	0.00104	0.00126
Property to assets		-0.00841		-0.00909		-0.00432		-0.01812		-0.00123		-0.02190**
		0.01001		0.01010		0.00763		0.01390		0.01134		0.00941
P/BV	0.00088	0.00019	-0.00028	-0.00062	0.00036	-0.00030	0.00085	0.00030	-0.00047	-0.00068	0.00052	-0.00013
	0.00142	0.00133	0.00143	0.00144	0.00090	0.00072	0.00118	0.00117	0.00184	0.00192	0.00070	0.00074
Indirect SOE	-0.00360	-0.00682	-0.00406	-0.00558	-0.00163	-0.00341	-0.02249***	-0.02491***	-0.01213**	-0.01265**	-0.01244	-0.01442
	0.00740	0.00768	0.00647	0.00743	0.00692	0.00737	0.00729	0.00759	0.00472	0.00565	0.00820	0.00922
R square	0.050815	0.013089	0.011727	0.024557	0.036824	0.004888	0.032218	0.022370	0.024035	0.017586	0.013288	0.023406
Observations	342	277	342	277	342	277	342	277	342	277	342	277

The table presents the OLS estimates for the sample of all firms or non-financial firms only. Robust standard errors at the firm level are reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.
Source: Own Calculations based on the data form the Thomson Reuters Eikon.