# What is the premium of removing a populist government? An event study<sup>\*</sup>

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#### Abstract

The 2023 parliamentary elections in Poland were exceptionally competitive. Although the polls were predicting the incumbents' victory, it was rather uncertain as to which coalition would rule the country in the aftermath of elections. The eventual victory of the opposition parties can be therefore considered as a quasi-random event that allows to test for causal effects of such victory. By employing an event study methodology, this paper examines how an unexpected success of a pro-democratic block or, reversely, an unexpected failure of a populist government is discounted by local stock markets. The results show that the (potential) removal of the populist government in Poland leads to abnormal positive returns at the Warsaw stock exchange. We further complement the short-term results with Bayesian structural time-series models to show how the Warsaw Stock Exchange evolved over a longer time horizon.

Keywords: Elections; Stock Market; Populism; Event Study

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### 1 Introduction

Although the research on national elections and their impact on the stock market is extensive, most studies focus on the effect of the victories of populist parties, as more countries experience a surge in populist rhetoric (Hartwell, 2022; Mueller et al., 2023; Funke et al., 2023).

In this study, we scrutinize a specific case: the 2023 parliamentary elections in Poland. We demonstrate how the unexpected success of a pro-democratic bloc, or conversely, the unexpected failure of a populist government, is reflected in local stock markets. We use event studies and synthetic control methods to estimate the stock market reactions to the elections and the persisting effects of the elections on the stock market index.

## 2 Data and methodology

#### 2.1 Event study

For our analysis, we designate the day following the elections, October 16, 2023, as the event date. To examine the impact of the populist government's removal on the stock market, we employ the market model to estimate the expected returns. We compute the expected returns for the Polish stock market using 220 trading days for the period from t = -250 to t = -20. Our formula is as in Equation (1).

$$E(R)_{it} = \beta_0 + \beta_1 R_{mt} \tag{1}$$

where  $R_{mt}$  is the return of our benchmark MSCI Europe index on day t. With this OLS market model, we find the expected returns of the local stock market (2) and compute the abnormal returns as in Equation (3) by substracting the expected returns from the actual returns.

$$R_{it} = (P_{it} - P_{it-1})/P_{it-1}$$
(2)

$$AR_{it} = R_{it} - E(R)_{it} \tag{3}$$

#### 3 Findings

Our results show that the (potential) removal of the populist government in Poland leads to abnormal positive returns at the Warsaw stock exchange on the event day. The results are robust to alternative specifications of the market model and are similar when we use the index of the 20 largest companies in the Warsaw stock exchange (WIG20) or substitute the benchmark model MSCI Europe Index with MSCI World Index.

We will further estimate the cumulative abnormal returns.

#### 4 Further analysis

One may argue that the benefits of removing a populist government can be temporary. To identify the long-term causal effect of the expected success of a prodemocratic bloc in Poland, we use a state-space model to analyze the temporal evolution of the Polish stock market. We apply the 'Causal Impact' methodology,



Figure 1: Causal Impact of the Polish Elections

which predicts the counterfactual market response using a synthetic control (Brodersen et al., 2015). In this context, the counterfactual market response would represent the continuation of the populist government.

The results show that the Warsaw stock exchange outperforms the counterfactual (see Figure 1). According to the results, the stock market is more than 15 thousand points higher than its counterfactual. When we change the control variables (other stock markets in the European market) to create the counterfactual stock market, the results remain similar. Furthermore, our time placebo tests confirm the validity of the results.

## 5 Conclusion

This study examines the stock market's reaction to the political shift in Poland, characterized by the removal of the populist government and the subsequent victory of the democratic block. The event study methodology is employed to analyze the market's response, revealing significant positive abnormal returns on the day following the election. Furthermore, the results indicate that these gains were not ephemeral; rather, the stock market exhibited a sustained upward trend throughout the year. This persistent increase suggests investor confidence in a democratic administration and the importance of political stability for better economic outcomes.

## References

- Brodersen, K. H., Gallusser, F., Koehler, J., Remy, N. and Scott, S. L. (2015), 'Inferring causal impact using Bayesian structural time-series models', The Annals of Applied Statistics 9(1). URL: https://projecteuclid.org/journals/annals-of-applied-statistics/volume-9/issue-1/Inferring-causal-impact-using-Bayesian-structural-time-seriesmodels/10.1214/14-AOAS788.full
- Funke, M., Schularick, M. and Trebesch, C. (2023), 'Populist Leaders and the Economy', The American Economic Review 113(12).
- Hartwell, C. A. (2022), 'Populism and financial markets', Finance Research Letters 46, 102479.
  URL: https://linkinghub.elsevier.com/retrieve/pii/S1544612321004190
- Mueller, L., Bartel, M. and Schiereck, D. (2023), 'Europe's gone "right" A comparative study of stock market reactions to populist success in Sweden and Italy', Finance Research Letters 55, 103829.
  URL: https://linkinghub.elsevier.com/retrieve/pii/S1544612323002027