

## NON-TECHNICAL SUMMARY

### **Winter is Coming! Or not? The effect of film industry on tourism**

Nowadays it seems there is competition in attracting film producers to screen their productions in specific locations, but at the same time, there is also a lack of data-driven academic research that measures the effects of film industry on local tourism. Existing research studies do explain the nexus between the filming industry and tourism, but they do not try to establish the causal link between major TV series/movie success and tourist visitation.

In this paper, we estimate the causal effect of filming the Game of Thrones (GoT) TV series on tourist performance of Dubrovnik, Croatia. GoT is a massively popular fantasy TV show based on George R. R. Martin's saga "A Song of Ice and Fire" that has been airing for six seasons. Dubrovnik, one of the Mediterranean gems, has been a TV set for King's Landing, an important place in saga's narrative. While there is plenty anecdotal evidence that GoT has actually benefited tourism in Dubrovnik, there has not been an attempt to establish a causal link in a rigorous and sound fashion.

Using data on the remaining 20 Croatian counties, we construct a synthetic Dubrovnik county which represents the county in a scenario where GoT had not been filmed. The difference between the observed Dubrovnik tourist outcome and the synthetic one represents the causal effect we estimate. Results indicate that:

- there is a statistically significant robust and positive effect of GoT on tourism in Dubrovnik
- the cumulative effect in the post-treatment period amounted up to almost 245 thousand more tourist arrivals, one and a half million more overnight stays, and almost 126 million euro more foreign currency revenues from travels
- the effect for Dubrovnik is large relative to the estimates for other counties (shown using placebo tests)
- there is a spillover effect that the filming of GoT in Dubrovnik has on other Croatian counties and the whole country.

This biggest limitation of this study is that data for promotion expenses are completely nonexistent and one could argue that we are missing one of the potentially most important predictors of tourism outcomes. Although we have tried to identify alternative sources of the effect and did not find them credible, the possibility of a confounded treatment is not completely ruled out. Therefore, the potential of future work on this topic lies in better and more comprehensive datasets.

Keywords: Dubrovnik, film industry, Game of Thrones, synthetic control, tourism outcome, treatment effect.