Analyzing Potential Economic Impacts of Sporting Mega Events
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ABSTRACT (48-point type)
The growth of global sporting events has been substantial, with countries dedicating billions of dollars towards an event that lasts roughly a month. This study gathers data on three economic indicators and analyzes the observed effect of hosting a mega event on each of the indicators in question. The observed effect was studied at different levels (time following the event), ranging from 1 year to 8 years.

INTRODUCTION
The Olympics and the World Cup have grown to be spectacles that catch the attention of viewers from around globe. However, the act of hosting one of these “mega events” involves considerable costs, economic or otherwise. The true economic impact of hosting a mega event is a question that has grown in relevance, especially with the attempt by the IOC and FIFA to entice lesser developed countries into hosting. This study seeks to examine whether there is a significant positive impact on the three economic indicators in question: unemployment rate, exports, and imports.

MATERIALS AND METHODS
Data was collected from reputable sources, and then checked for stationarity using a unit root test in Stata. Any necessary transformations were made to make the data stationary, and then an interrupted time series analysis was run using an ARIMA model in Stata. The mega event itself was used as the interruption time. A graphical example of the interrupted time series analysis is shown below (courtesy of the Centre for Statistical Methodology).

RESULTS
Table view of full observed effects and significance values

CONCLUSIONS
Despite the size and grandeur of the Olympics and the World Cup, the economic impact is certainly a difficult question to answer. In this study, the following was concluded:
- Any impact on unemployment, exports, and imports is limited in its impact.
- In this study, the only significant impact was a 1 year level effect that showed that Australia’s exports were actually negatively affected from hosting the mega event.
- The impact itself cannot be attributed to the mega event itself due to questionable significance.
- The impacts are felt most strongly immediately following the event, and are seemingly insignificant as time passes.

The results of this study, as well as analysis of past studies help conclude the following realization regarding the hosting of a sporting mega event:
A promise of an economic windfall for host countries is largely exaggerated, and a mega event registers simply as a blip on the radar in the greater scope of a country’s economy. In a way, the main takeaway is that countries and cities hosting a mega event should be cautious of ex-ante studies indicating positive economic impacts.

This is not to say hosting an Olympics or World Cup is bad, but rather it is to say that the anticipated economic benefit may be overstated in terms of its actual significance.

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