

THE ECONOMIC IMPLICATIONS OF CLIMATE CHANGE: CHANGES IN CENTRAL TENDENCY AND VARIABILITY

Ryan Savitz, Neumann University

[dx.doi.org/10.18374/EJBR-14-3.3](https://doi.org/10.18374/EJBR-14-3.3)**ABSTRACT**

Climate change has been a topic of worldwide concern and discussion for decades. The great European heat wave of 2003 is one example of a climatic anomaly that met the two following criteria: (1) it was widely purported to potentially be due to climate change and (2) it incurred significant economic and human costs (Schar et. al. 2004). Many corporate and government entities are affected, either directly or indirectly, by such climatic phenomena. Two aspects of a changing climate are changes in the central tendency of various climatic parameters and changes in the variability of these same parameters. Statistical analyses are conducted in this paper in order to assess changes in central tendency and variability of the climate in Paris, one of the many cities affected by the heat wave of 2003. It is found that, contrary to the perception of some, this heat wave was most likely not due to changes in temperature variability. The economics of an environment where climatic variability is constant, and the only changes are in central tendency, are analyzed herein. It is found that such changes have a less profound negative economic impact than the situation where both variability and central tendency change.

Keywords: *climate change, central tendency, variability, economics of climate change, risk management.*