Detección de puntos de cambio en serie USD/CLP en contexto estallido social y Covid-19, aplicando una perspectiva Bayesiana

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Resumen

On the relevant factors that makes the value of the dollar vary in Chile is the difference in short-term interest rates between the U.S. and Chile, in which changes in the variables associated with economic growth can generate changes in the expectations of these rates. In particular, the social outburst experienced in Chile during October 2019 as a result citizens' discontent, pushed by the extension of different public policies that effect the income level of the most economically vulnerable social classes, and the global Covid-19 pandemic are two major events that effect the dollar/Chilean peso exchange rate. In this research work, we applied a Bayesian methodology that considers a functional effect for the detection of change-points as described in Baragatti et al. (2019) with the objective of detecting change-points in the important dates related to these events described above, coding this methodology in the Python programming language. Among the results obtained we have that the method manages to detect the social outbreak, the beginnings of the pandemic in Chile and when the economic reactivation begins in the USA and Europe.

Referencia

1. Baragatti, M., Bertin, K., Lebarbier, E., and Meza, C. (2019). A Bayesian approach for the segmentation of the series with a functional effect. *Statistical Modelling*, 19(2): 194-220.