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Machine learning methods for inflation forecasting in Brazil: new contenders versus classical models

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Dr. Serafín Martínez Jaramillo

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Contribution

- The paper introduces Machine Learning methods for inflation forecasting and compares them with well stablished and widely used forecasting methods.
- The paper is very interesting and well written.
- The introduction of the ML tools is very much welcomed.
- The paper shows that some ML techniques are competitive against the well-stablished methods.
- The comparison is fair and rigorous.

Minor comments

- A horse race is always problematic because you will always face criticisms from both sides regarding the best possible fine tuning of each tool. The comment is on coverage.
- You did well resorting first to “white box” approaches but what about the “black box” ones.
- Because of the length of the paper I would keep the introduction to the ML tools in the main body of the paper but move the more detailed discussion to an appendix, researchers will get more familiar with the techniques.

More important comments

- On random forests: you can do even better. You mention on a foot note “pruning” and other techniques to improve performance. They are important to reduce complexity and overfitting.
- You mention that other techniques could be included in future work: ANNs, SVMs, (LSTM) networks etc.
- Despite being part of the “black box” branch, their performance in forecasting is well-known and your horse race will be more complete.
- There are other tree based techniques like Genetic Programming which are similar to random forest which can be useful.

Thanks!

- Rodríguez Vargas, A. (2020) Forecasting Costa Rican Inflation with Machine Learning Methods, Latin American Journal of Central Banking, In press.
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- Neal Wagner, Moutaz Khouja, Zbigniew Michalewicz & Rob Roy McGregor (2008) Forecasting economic time series with the DyFor genetic program model, Applied Financial Economics, 18:5, 357-378, DOI: 10.1080/09603100600949200