Forecast Adjustment Under Shocks: A Unification

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May 29, 2024

Abstract

This work systematizes and unifies the rich landscape of model adjustment and model correction methods, with a special focus on forecast adjustment under the presence of shocks.

1 Introduction

1.1 Model Adjustment Using Similarity-Based Parameter Correction: A Global Overview

1. k-dimensional random object to predict
2. a parametric model family shared by donors
3. a correction term for the model family shared by donors
4. a parametric specification for the correction term
5. a reliable estimation procedure for the shared model
6. a reliable estimation procedure for the correction term
7. a correction function that aggregates (i.e. maps) donor correction terms based on some notion of similarity

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2 Setting

3 Model-Specific Considerations

3.1 ARIMA

3.2 GARCH

3.3 HAR

3.4 VAR

4 Real Data Examples

5 Discussion

References