Machine Learning

How Global is Predictability?

The Power of Financial Transfer Learning

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We show that asset pricing has a strong global component in the sense that a common global model has stronger predictability of stock returns than local models estimated in each country - even when the global model is estimated without the use of local data. While locally estimated models add no value to a global model, asset pricing nevertheless has a small local component. To detect the local component, we develop a refined transfer learning model that gains power and precision by building off the global component, denoted the "generalized elastic net" (GENet). We estimate that the predictive parameters are 94% global.

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