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## ‘EMPIRICAL ASSET PRICING VIA MACHINE LEARNING: THE GLOBAL EDITION’

BY ADAM ZAREMBA – MONTPELLIER BUSINESS SCHOOL

### ABSTRACT



We examine the cross-section of international equity risk premia with machine learning methods. We identify, classify, and calculate 88 market characteristics and use them to forecast country returns with various machine learning techniques. While all algorithms produce substantial economic gains, neural networks prove particularly effective. The associated long-short portfolio yields 1.69% per month. Most models select a consistent group of leading predictors: long-run reversal, earnings yield, size, market breadth, and momentum. The return predictability is driven by mispricing rather than risk. In consequence, it is boosted by high limits to arbitrage but gradually diminishes over time as global markets mature.

**Keywords:** machine learning, factor investing, the cross-section of country stock returns, equity risk premia, international markets, return predictability, forecast combination