

# Local vs. global risk in international size, value and momentum returns\*

Ivan Petzev<sup>†</sup> Andreas Schrimpf<sup>‡</sup> Alexander F. Wagner<sup>§</sup>

PRELIMINARY – December 1, 2014

## Abstract

Under financial market integration, one common set of risk factors prices international stock returns. Strikingly, previous research finds that in asset pricing tests global versions of the Fama-French and Carhart factors significantly underperform local versions of these factors. Existing work conducts “full-sample tests,” considering long time periods, for example, from the 1980s to the 2010s. These full-sample tests, however, do not allow for the model flexibility needed to account for the effect of potential increasing financial market integration over the past two to three decades. In this paper, we present novel evidence that while local factor models still outperform their global counterparts in recent years, global factor models have been catching up significantly in terms of pricing errors (alpha) and explanatory power (R-squared). We also document that the catch-up process is associated with rising cross-correlations of factors. We develop a theoretical framework to try to differentiate possible explanations (that include, but are not limited to advancing financial market integration) for this set of findings.

JEL-Classification: F36, G12, G15.

Keywords: International Asset Pricing, Size, Value, Momentum, Financial Integration

---

\*The authors appreciate financial support from the Swiss National Fund (SNF) and from the Swiss Finance Institute, the NCCR FINRISK, CREATES, and the Research Priority Program Finance and Financial Markets at the University of Zurich. We are grateful to Peter Schmidt for excellent research assistance.

<sup>†</sup>University of Zurich, Email: ivan.petzev@bf.uzh.ch.

<sup>‡</sup>Bank for International Settlements, Email: andreas.schrimpf@bis.org.

<sup>§</sup>Swiss Finance Institute - University of Zurich, CEPR, and ECGI, Email: alexander.wagner@bf.uzh.ch.