

486 Views | 25 CrossRef citations to date | 9 Altmetric

PORTFOLIO MANAGEMENT

# Portfolio Constraints and the Fundamental Law of Active Management

Roger Clarke, Harindra de Silva & Steven Thorley

Pages 48-66 | Published online: 02 Jan 2019

🗨️ Cite this article 🔗 <https://doi.org/10.2469/faj.v58.n5.2468>

Sample our Law Journals >> [Sign in here](#) to start your access to the latest two volumes for 14 days

[References](#) [Citations](#) [Metrics](#) [Reprints & Permissions](#) [Read this article](#)

### We Care About Your Privacy

We and our 855 partners store and access personal data, like browsing data or unique identifiers, on your device. Selecting "I Accept" enables tracking technologies to support the purposes shown under "we and our partners process data to provide," whereas selecting "Reject All" or withdrawing your consent will disable them. If trackers are disabled, some content and ads you see may not be as relevant to you. You can resurface this menu to change your choices or withdraw consent at any time by clicking the ["privacy preferences"] link on the bottom of the webpage [or the floating icon on the bottom-left of the webpage, if applicable]. Your choices will have effect within our Website. For more details, refer to our Privacy Policy. [Here](#)

We and our partners process data to provide:

I Accept

Reject All

[Show Purpose](#)



The expected value added in an actively managed portfolio depends on both the manager's forecasting skill and the manager's freedom to take appropriate positions in securities that reflect those forecasts. The "fundamental law of active management" gives the maximum expected value added for an actively managed portfolio based on the forecasting ability of the manager and the breadth of application. The fundamental law does not, however, address the impact of portfolio constraints on potential value added. Constraints such as no short sales and limits on security concentration impede the transfer of information into optimal portfolio positions and decrease the expected value added.

We generalize the fundamental law of active management to include a transfer coefficient as well as an information coefficient. The information coefficient measures the strength of the return-forecasting process, or signal, and the transfer coefficient measures the degree to which the signal is transferred into active portfolio weights. The transfer coefficient turns out to be a simple scaling factor in the generalized fundamental law and is an intuitive way to measure the extent to which constraints reduce the expected value of forecasting ability. In an ideal world without any constraints, a well-constructed portfolio has a transfer coefficient of 1.0 and the original form of the fundamental law applies. In practice, managers often work under constraints that produce transfer coefficients ranging from 0.3 to 0.8. The transfer

coefficient is predicted to be 0.8) of what

Measuring the impact of the transfer coefficient on the expected value added of the portfolio is a key step in the process of portfolio optimization. The transfer coefficient is a measure of the degree to which the signal is transferred into active portfolio weights. The transfer coefficient is a simple scaling factor in the generalized fundamental law and is an intuitive way to measure the extent to which constraints reduce the expected value of forecasting ability. In an ideal world without any constraints, a well-constructed portfolio has a transfer coefficient of 1.0 and the original form of the fundamental law applies. In practice, managers often work under constraints that produce transfer coefficients ranging from 0.3 to 0.8. The transfer coefficient is predicted to be 0.8) of what



In addition to the transfer coefficient's ex ante role, the transfer coefficient is also a critical parameter in reconciling realized performance with the realized success of return forecasting. We derive a decomposition of ex post active management performance based on the transfer coefficient and the realized information coefficient. The ex post performance decomposition indicates that only a fraction (the transfer coefficient squared) of the variation in realized performance, or tracking error, is attributable to variation in realized information coefficients. For example, if the portfolio has no constraints and the transfer coefficient is 1.0, variation in realized performance is wholly attributable to the success of the return-prediction process. If the transfer coefficient is 0.3, however, only 9 percent of performance variation is attributable to the success of the signal and the remaining 91 percent is attributable to constraint-induced "noise." Managers with low transfer coefficients will experience frequent periods when the signal works but performance is poor and periods when performance is good even though the return-forecasting process failed.

Related

Global

Fischer  
Financial  
Publishe

ESG

Gunnar  
Journal of  
Publishe

The Sta



View more

Information for

- Authors
- R&D professionals
- Editors
- Librarians
- Societies

Opportunities

- Reprints and e-prints
- Advertising solutions
- Accelerated publication
- Corporate access solutions

Open access

- Overview
- Open journals
- Open Select
- Dove Medical Press
- F1000Research

Help and information

- Help and contact
- Newsroom
- All journals
- Books

Keep up

Register to receive updates by email



Registered with the Copyright Clearance Center  
5 Howick Place

