




# A Backtesting Protocol in the Era of Machine Learning

**Rob Arnott (/search?query=&f%5B0%5D=authors%3AArnott%2C%20Rob), Campbell R. Harvey (/search?query=&f%5B0%5D=authors%3AHarvey%2C%20Campbell%20R.), Harry Markowitz (/search?query=&f%5B0%5D=authors%3AMarkowitz%2C%20Harry)**

The Journal of Financial Data Science Winter 2019, 1 ( 1) 64 - 74

DOI: 10.3905/jfds.2019.1.064

Download PDF | Add to Favorites | Share | Labels | Cite | Alerts




(/content/iijjfds/1/1)

**The Journal of Financial Data Science Vol 1 Issue 1**

(/content/iijjfds/1/1)

Volume 1, Issue 1

Winter 2019 (/content/iijjfds/1/1)

Download issue PDF

**Log in (/openid-connect/sams-sigma/login-redirect?prompt=login&openid_connect_destination=/content/iijjfds/1/1/64) to access this content or Request a Demo (/Request-Demo)**

**Log in (/openid-connect/sams-sigma/login-redirect?prompt=login&openid_connect_destination=/content/iijjfds/1/1/64)**

**Request a Demo (/Request-Demo)**

Find topics, articles or authors...

Focus (/highwire_display/entity_view/node/367979/content_tabs)

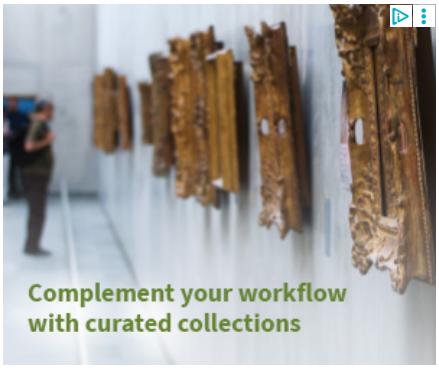
Article | Authors

Download PDF | Add to Favorites | Share | Labels | Cite | Alerts

Previous (Https://Www.Pm-Research.Com/Content/Iijjfds/1/1/45) | Next

Back to top

Article Topics +










PORTFOLIO MANAGEMENT RESEARCH by S&P Global (/)

Part of With Intelligence by S&P Global

About (/about-us)

Contact (/contact-us)

Sticky Pm Research (/journal/pmresearch/)

LOCATIONS

**New York**

55 Water Street

New York, NY 10010

United States

**London**

One London Wall

London, EC2Y 5EA

0207 139 1600

**Hong Kong**

Level 3 Three Exchange Square

8 Connaught Place

Central Hong Kong

EXPLORE OUR RESEARCH

**By Topic**

Portfolio Management in Theory and Practice (/topic/portfolio-management-theory-and-practice)

Quantitative Finance (/topic/quantitative-finance)

Economics and Financial History (/topic/economics-and-financial-history)

Risk Management in Theory and Practice (/topic/risk-management-theory-and-practice)

Asset Classes (/topic/asset-classes)

Regulation, Taxation, Governance, and Compliance (/topic/regulation-taxation-governance-and-compliance)

**By Journal**

Portfolio Management (/index.php/content/iijpormgmt)

Financial Data Science (/index.php/content/iijjfds)

Impact & ESG Investing (/index.php/content/pmrjesg)

Fixed Income (/index.php/content/iijfixinc)

Investing (/index.php/content/iijinvest)

Derivatives (/index.php/content/iijderiv)

Alternative Investments (/index.php/content/iijaltinv)

Retirement (/index.php/content/iijretire)

Wealth Management (/index.php/content/iijwealthmgmt)

Beta Investment Strategies (/index.php/content/iijindinv)

Structured Finance (/index.php/content/iijstrfin)

Trading (/index.php/content/iijtrade)

Private Equity (/index.php/content/iijpriveq)

Snapshots (/index.php/snapshots)

© 2026 With Intelligence Ltd (https://withintelligence.com/) | All material subject to strictly enforced copyright laws.

Cookies (https://www.withintelligence.com/cookies/)

Code of ethics (/code-of-ethics)

Terms & conditions (https://www.withintelligence.com/terms/)

Privacy policy (https://withintelligence.com/privacy/)