

Predictive Modeling, Volatility, and Risk Management in Financial Markets

In Memory of Peter F. Christoffersen

(Part I)

Peter F. Christoffersen left us in 2018, much too soon, at the age of 51. He was a world-renowned financial econometrics researcher, educator, lecturer, administrator (including hosting the 2014 SoFiE conference at the University of Toronto), and public servant (including the U.S. Federal Reserve System's Model Validation Committee, charged with reviewing the models used for bank supervision and regulation). If Peter was an esteemed colleague, he was equally a dear friend. His unbridled optimism, relaxed personality, and remarkable humility endeared him to all who knew him.

We honor Peter's path-breaking research in this special issue. Its style is marked by a masterful blend of intuition, theoretical rigor, and always, empirical relevance. It influenced and inspired countless others in academics and industry, world-wide. It has four basic, and highly-intertwined, organizational themes:

1. Predictive models and their evaluation (e.g., his classic early work on evaluating the conditional calibration of interval forecasts, Christoffersen (1998) – one of the *International Economic Review's* ten most-cited papers since its founding in 1960)
2. Financial market risk measurement and management (e.g., his celebrated text, Christoffersen (2003))
3. Asset return volatility modeling and forecasting (e.g., his survey, Andersen et al. (2013))
4. Financial derivative markets with emphasis on options (e.g., Christoffersen et al. (2009), one of his many widely-cited papers).

We humbly offer this two-part special issue as a tribute to Peter. The included papers reflect his style and interests, not only methodologically as characterized above, but also in their wide variety of substantive applications, clearly testifying to the depth and breadth of the Christoffersen legacy.

Francis X. Diebold
University of Pennsylvania

René Garcia
University of Montreal

Kris Jacobs
University of Houston

References

Andersen, T.G., T. Bollerslev, P.F. Christoffersen, and F.X. Diebold (2013), “Financial Risk Measurement for Financial Risk Management,” In G. Constantinedes, M. Harris, and R. Stulz (eds.), *Handbook of the Economics of Finance*, Volume 2, Part B, Elsevier, 1127-1220.

Christoffersen, P. (1998), “Evaluating Interval Forecasts,” *International Economic Review*, 39, 841–62.

Christoffersen, P.F. (2003), *Elements of Financial Risk Management*, Academic Press.

Christoffersen, P.F., S. Heston, and K. Jacobs (2009), “The Shape and Term Structure of the Index Option Smirk: Why Multifactor Stochastic Volatility Models Work so Well,” *Management Science*, 55, 1914–1932.