Andreas Bang Nielsen

Copenhagen Business School
Department of Finance, FRIC
2000 Frederiksberg, Denmark:

E-mail: abn.fi@cbs.dk
+45 30 46 29 99
https://sites.google.com/site/andreasbanielsen/home

Education

Copenhagen Business School, Denmark — Sep. 2013 - Jan. 2018 (expected)
PhD Fellow in Finance, Center for Financial Frictions

UCLA, Anderson School of Management, USA — Jan. 2016 - Jun. 2016
Visiting Research Scholar (sponsor: Professor Mikhail Chernov)

University of Copenhagen, Denmark — Sep. 2012
M.Sc. Mathematical-Economics

University of Copenhagen, Denmark — June 2012
B.Sc. in Mathematical-Economics

Research Fields

Financial Economics, Credit risk, Foreign Exchange, Derivatives Pricing, Empirical Asset Pricing

Research Experience and Other Employment:

Copenhagen Business School, Denmark — Sep. 2012 - Sep. 2013
Research Assistant for Prof. David Lando and Prof Søren Hvidkjær

Nykredit, Denmark — Nov. 2009 - Jan. 2012
Junior Quantitative Analyst at fixed income trading desk

Teaching Experience

Copenhagen Business School, Denmark — Fall 2013 - 2017
Lecturer in graduate course in Mathematical Finance

Fellowships and Grants

Research Grant from Otto Mønsted Fund — 2016
Research Grant from Augustinus Fund — 2016
Research Grant from Otto Knud Højgaards Fund — 2016

Programming Skills

Experienced: Matlab, R and VBA
Intermediate: Python, SQL, SAS, Maple and Mathematica

Completed Research Papers

"Option-Implied Currency Betas", (Job Market Paper)

I propose a model-free method to derive forward-looking betas to currency portfolios from cross-pair currency options. Using the dollar factor---an equal-weighted basket of foreign currencies against the U.S. dollar---as the systematic factor, I find that these option-implied betas are significantly better predictors of realized betas and currency excess returns compared to traditional rolling window betas. Constructing portfolios based on option-implied betas leads to a significantly positive relation between ex-ante betas and ex-post portfolio returns, whereas, there is an insignificant relation when historical betas are used.
Furthermore, using the option-implied betas, I construct a measure for systematic volatility for each currency and provide evidence for a positive cross-sectional relation between returns to selling volatility derivatives and systematic volatility.

"Quanto CDS Spreads", with David Lando

Quanto CDS spreads are differences between premiums of CDS contracts written on the same underlying but with different currency denominations. Such spreads can arise in arbitrage-free models and depend on the risk of a jump in the exchange rate upon default of the reference name and on the correlation between the FX-rate and the intensity of default. We develop a model that separates the contribution of these two effects to quanto spreads and apply it to four Euro area sovereigns. We also investigate to what extent quanto spreads can explain differences in yields of sovereign bonds issued by the same country in different currencies and point out that comparing bond prices across currency denominations using standard FX forward hedges misses the correlation component in quanto spreads.

References:

Professor David Lando
Copenhagen Business School
Solbjerg Plads 3
DK – 2000 Frederiksberg
(+45) 3815 3613
dl.fi@cbs.dk

Professor Christian Wagner
Copenhagen Business School
Solbjerg Plads 3
DK – 2000 Frederiksberg
(+45) 3815 362
cwa.fi@cbs.dk

Professor Peter Christoffersen
Rotman School of Management
University of Toronto
105 St. George Street 44
Canada, M5S 3E6, Toronto
416-946-5511
peter.christoffersen@rotman.utoronto.ca