

Andreas Brøgger

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EDUCATION

- Doctor of Philosophy**, Finance
Copenhagen Business School (FRIC Scholarship) 2017 – Present
Supervisors: David Lando, Jens Dick-Nielsen
Coordinator, PhD brownbag series
- Advanced Diploma**, Economics
University of Cambridge (CEDIES Scholarship) 2014
Final project: Evaluating the effects of preschool care and early education
- Master of Physics**, Bachelor of Science (with honours)
University of Warwick (CEDIES Scholarship) 2013
First Class degree
Thesis: Relaxation and rapid scan electron paramagnetic resonance
Advisors: Steve Dixon, Mark Newton
- Summer School**, Economics
London School of Economics 2012
Advanced Microeconomics (A+), Advanced Macroeconomics (A+)
- Summer School**, Chinese Political Strategy, Chinese Language (Oral, Written)
Renmin University (Warwick Scholarship), Beijing, China 2011

INDUSTRY EXPERIENCE

- Head of Section**, Systemic Risk and Financial Stability
Danmarks Nationalbank, Denmark 2015 – 2017
- Analysed financial network risks for the Systemic Risk Board of Denmark
 - Wrote articles for the Financial Stability Publication
 - Contributed to the Working Paper series
 - Lead interconnectedness working group with the Financial Supervisory Authority
 - Implemented SRISK in a Danish setting
 - Organisation of conference on Systemic Risk of Pro-cyclical margins
- Trainee**, Banking and Markets 2014 – 2015
- Implemented Calypso v14 front-to-back cross asset solution for Danmarks Nationalbank including FX, Fixed Income, Repos, Issuance, Corporate Actions, reporting, etc.
- Intern**, Risk and Compliance
Sparinvest, Denmark 2014
- Researched and implemented the new EMSA directives concerning reporting of securities
 - Developed a module linking funds and securities to their geographical and asset legal requirements
- Intern**, Strategy Consulting
Eden McCallum, London, United Kingdom 2014

RESEARCH INTERESTS

Financial Intermediation, Asset Pricing, Macro-Finance

TEACHING

Financial Intermediation

Teaching Assistant for Professor David Lando 2018

- Wrote assignment solutions
- Feedback on 74 group assignments
- Marking of 105 student exams

Financial Derivatives and their Applications

Bachelor thesis advisor for 4 students covering: 2018

- VIX trading strategies
- CDO risks in the Great Recession

COMPUTER SKILLS

Languages Expert in MATLAB, L^AT_EX. Experience in C, JAVA, HTML/CSS, SQL, VBA
Software and OS Experience in SAS, STATA, EViews, EXCEL. MAC OS, WINDOWS, LINUX

RESEARCH IN PROGRESS

5. Optimal Macroprudential Policy under Housing Shocks

Housing shocks can spill over to the financial sector and back to the real economy, creating a negative spiral. Here we explore how macro prudential policy can be used effectively to dampen such dynamics in a way monetary policy is incapable of. Making it a valuable additional instrument.

4. The Ethical Pricing Factor (with Alexander Kronies)

The last 10 years has seen a large inflow to Ethical Social and Governance responsible funds (ESG). By constructing a long-short ESG portfolio factor, we document how ESG helps explain expected returns. As funding costs, like the expected cost of capital, has implications for which projects get financed, we further test this relationship on real investments.

3. Regulatory Uncertainty and Capital Buffers (with Jens Dick-Nielsen)

Financial regulation has since the crises been uncertain, leading to significant changes for financial agents. Using a simple model, we show how uncertainty about future regulation might affect current behaviour.

2. Regulatory Cliff effects and Systemic Risk

Since the financial crises much legislation has been implemented to decrease systemic risk, however have these implementations lead to new risks? This paper investigates systemic risks arising from Basel implemented cliff effects. Sudden discrete changes to asset properties, from regulatory cliff effects, cause financial banks to act simultaneously in a homogeneous way, exacerbating systemic risk. We develop a model which quantifies these non-linear effects, and find that under certain circumstances, even small changes have drastic consequences. Taking the model to the data, we find that current market measures imply that the circumstances are satisfied for the Danish financial system.

RESEARCH PAPERS

1. **Identification and assessment of systemic risks in financial networks: Modelling fire sales from regulatory cliff effects**, *Danmarks Nationalbank Working Paper*, Number 117.

This paper investigates fire sales triggered by regulatory cliff effects induced by the loss of Capital Requirements Regulation (CRR) compliance on covered bonds. The loss of CRR compliant status leads to banks holding these covered bonds to lose several regulatory advantages, one consequence being a lower solvency. In our analysis, following the loss of CRR compliance, banks sell off their covered bonds in a fire sale, in an attempt to return to their initial solvency, resulting in losses of equity for the system as a whole. Further, we find that, for price impacts larger than a critical threshold, even small shocks lead to explosive fire sales and large losses of equity. While these losses can be averted if the banks allow their solvency levels to fall temporarily, other regulations, such as those relating to large exposures to other banks, could still trigger similar fire sales.

PRESENTATIONS (* indicates presentation by co-author)

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| 8. AFA, PhD Poster Session | January 2019 |
| 7. FMA Europe | June 2018 |
| 6. RiskLab* | May |
| 5. Bank of England, Fire Sale Workshop* | April |
| 4. Copenhagen Business School, PhD Day | March |
| 3. Lund University* | October 2017 |
| 2. Nykredit (Largest Nordic Mortgage Bank) | September |
| 1. Danmarks Nationalbank | August 2016 |
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DISCUSSIONS

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| 1. FMA Europe, Systemic Risk and Vulnerabilities of Bank Networks | June 2018 |
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OTHER

Volunteering: Increasing Access to Local Investments Startup (Current), Huset-Kbh Cultural Assistant (Current), TEDxWarwick Speakers Coordinator (2012), Students in Free Enterprise Project Manager (2013), Girton College Cambridge MCR Committee (2014), Sofar Copenhagen Organiser (2016), Girton College Cambridge Rowing Team (2014), Maths and Physics Society Treasurer (2012), Warwick University Handball Team (2010).

Invitations: McKinsey London High Potential Workshop (2013)

Languages: Danish (Native), English (Fluent), French German Swedish Norwegian (Conversational)

Citizenship: Danish

REFERENCES

David Lando

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Steve Dixon

Professor of Physics, NDT Group Leader
University of Warwick
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Copenhagen Business School
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