Dr Zoe Tsesmelidakis

Contact Information

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Oxford-Man Institute
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Academic Appointments

University of Oxford, Oxford, U.K. — 2012–

Senior Research Fellow, jointly affiliated with

- Oxford-Man Institute of Quantitative Finance
- Saïd Business School
- Nuffield College

MIT Sloan School of Management, Cambridge, MA — 2011

Visiting Doctoral Student, Finance Group

- Advisor: Prof. Robert C. Merton

Goethe University Frankfurt, Germany — 2008–2012

Research Assistant, Prof. Jan Pieter Krahnen

Education

Goethe University Frankfurt, Germany

Ph.D. candidate in the Graduate Program — 2006–2012
"Finance and Monetary Economics"
Graduated "summa cum laude"

Diplom (M.S. equiv.) in Business Administration — 2002–2006

Research Interests

Financial Economics, Asset Pricing, Financial Regulation, Banking, Credit Risk

Working Papers

Beyond Capital Regulation: An Underestimated Risk Source,
with Frederic A. Schweikhard

The Impact of Government Interventions on CDS and Equity Markets,
with Frederic A. Schweikhard

The Value of Government Guarantees,
with Robert C. Merton & Frederic A. Schweikhard

The Internalization of Systemic Risk: An Analysis of Bank Levy Schemes,
with Frederic A. Schweikhard, Mark Wahrenburg *R&R Journal of Banking and Finance*

Government Guarantees and the Valuation of Bank Debt in Europe,

Work in Progress

How to Become Too-Big-to-Fail – The Impact of Mergers on Credit Risk,
with Frederic A. Schweikhard

Teaching Experience

University of Oxford, Saïd Business School, U.K.

- Finance II, MBA and MLF classes in advanced corporate finance — 2014–
- Financial Management, undergraduate lecture on the fundamentals of finance — 2013–

Goethe University Frankfurt, Germany

- Regulation & Systemic Risk, field seminar with Prof. Josef Ackermann — 2011
- Financial Crises, undergraduate field seminar — 2008
- Advanced Corporate Finance, Master's lecture, TA — 2008
- Co-Supervisor of 15+ Master's and Bachelor's theses — 2008–2012
- Finance III, undergraduate classes on corporate finance, — 2007–2008
- Finance II, undergraduate classes on capital markets — 2007–2008
- Finance I, undergraduate classes on basic finance — 2006–2007
- Cost Accounting, undergraduate classes — 2005–2006
- Basic Accounting, undergraduate classes — 2004–2007

Honors and Awards	Australian Securities Exchange (ASX) Prize, AFBC, Sydney, Australia Awarded for the best paper presented on derivatives/quantitative finance	2013
	Grant (£120,000), Economic and Social Research Council, for the proposal "Credit Default Swap Data, Contagion and Financial Resilience"	2012
	Young Economist, Lindau Nobel Laureate Meetings in Economics, Germany Scholarship, German Academic Exchange Service (DAAD) AAII Best Paper in Investment, SWFA, Houston, TX	2011
	Outstanding Doctoral Student Paper, SFA, Asheville, NC Best Conference Paper by Doctoral Students Finalist, EFA, Frankfurt, Germany	2010
	Doctoral Scholarship, Goethe University Frankfurt, Germany	2007–2008
Invited Presentations & Seminars	American Finance Association	2016
	NUS Risk Management Institute - 9th Annual Conference, Financial Intermediation Research Society (FIRS), China International Conference in Finance (CICF), Asian Finance Association, University of Hong Kong, National University of Singapore, Goethe University Frankfurt, University of Oxford, WWU Münster	2015
	NBER Risks of Financial Institutions Workshop, American Finance Association	2014
	Australasian Finance & Banking Conference, Southern Finance Association, Minneapolis Fed "Too Big to Fail" Workshop, European Economic Association, Western Finance Association	2013
	8th Credit Risk Conference – Moody's and NYU Stern, Warwick Business School, University of Oxford, Aalto University School of Economics, Isenberg School of Management, University Paris Dauphine, Concordia University, American Finance Association	2012
	French Finance Association, 12th Symposium on Finance, Banking, and Insurance KIT, European Economics Association, Southwestern Finance Association	2011
	Annual Australasian Finance & Banking Conference, Southern Finance Association, CRSP Forum at the Chicago Booth School of Business, German Finance Association (DGF), C.R.E.D.I.T. 2010, GRETA Associati, Northern Finance Association, European Finance Association	2010
Media Coverage of Work	The Case for Megabanks Fails, Economix, New York Times, 05/02/2013 Why You Should Care About That $83 Billion Bank Subsidy, Bloomberg, 02/28/2013 Election has Big Banks in Crosshairs, Reuters, 07/27/2012 The Price of Too Big to Fail, Bloomberg Businessweek, 07/05/2012 JPMorgan's $10 Billion Subsidy, Bloomberg Businessweek, 07/02/2012	
Professional Service	*Discussant:* Australasian Finance & Banking Conference, Sydney, Australia	2013
	French Finance Association, 3rd Annual Conference on Hedge Funds, Paris, Southwestern Finance Association	2011
	Referee: Review of Finance, Journal of Banking and Finance	
Professional Experience	*Student trainee*, Equity & Derivatives division, BNP Paribas S.A., Frankfurt	2007
	Intern, FSS Solution Sales & Business Development division, IBM, Frankfurt	2003
	Student research assistant, E-Finance Lab, Goethe University Frankfurt	2003–2005
Languages	German (native), Greek (native), English (fluent), French (basic)	
Software Skills	Excellent command in statistics software (Stata), programming skills in C/C++, Visual Basic for Applications, database management skills in MySQL	
Citizenship	German	

References

Prof. Robert C. Merton
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Working Papers

Beyond Capital Regulation: An Underestimated Risk Source
with Frederic A. Schweikhard

Leverage constraints are an important pillar of bank regulation. Yet, this paper argues that in times of economic turmoil affecting a bank's borrower base at large, the traditional bank risk measures of leverage and capital ratios understate the total increase in bank risk. In a sequence of systematic shocks hitting the borrowers, the impact on a bank's asset value grows disproportionately with every bump due to the concavity of the loan value in the borrower's assets. Although this increase in credit exposure cannot be reflected by capital ratios, a structural default model can capture the added sensitivity. Using a sample of 334 non-financial firms and 27 banks, we demonstrate the nonlinear nature of the changes in banks' risk exposures after a series of shocks to their borrowers and show that the effect is more severe for firms with low ratings. We also simulate the impacts of the same series of shocks under different leverage scenarios and are thus able to assess the magnitude of asset risk relative to leverage risk. Further it appears that the benefit of ex-post deleveraging after a shock is limited despite its high cost. The results emphasize the importance of systematic risk among borrowers and of the ongoing monitoring of changes in economic climate so as to induce banks to provision adequately for risk changes.

The Impact of Government Interventions on CDS and Equity Markets
with Frederic A. Schweikhard

We investigate the impact of government guarantees on the pricing of default risk in credit and stock markets in light of the unprecedented wave of rescue actions witnessed in the 2007-09 financial crisis.Using a Merton-type credit model, we provide evidence of a structural break in the valuation of U.S. bank debt in the course of the crisis, manifesting in a lowered default boundary, or, under the pre-crisis regime, in lower credit spreads than if there were no guarantees. The counterfactual is estimated from stock market information, the underlying assumption being that, unlike creditors, shareholders are not the targeted beneficiaries of interventions. The discrepancies are positively related to firm size, default correlation, systemic risk, and high ratings, thus corroborating our too-big-to-fail hypothesis. The framework we develop allows (1) to measure the magnitude of the guarantees, (2) to identify which firms are perceived as TBTF and when guarantees become particularly valuable, and finally (3) to have a better estimator of the standalone financial condition of a firm, and as such opens up interesting avenues for research and policy applications in the area of economic policy and regulation.

The Value of Government Guarantees
with Robert C. Merton & Frederic A. Schweikhard

Firms considered "too big to fail" (TBTF) benefit from access to cheaper funding during crises. Using a comprehensive data set of bond characteristics and prices in the primary and secondary market for a sample of 74 U.S. financial institutions, we investigate how reduced debt capital costs affect the positions of shareholders and creditors. Issue and transaction prices are revalued on the basis of a funding advantage estimated using a structural model. Our results indicate that wealth transfers to investors sum up to $365bn and that banks shifted to fixed-rate short-term funding to take advantage of their TBTF status.

The Internalization of Systemic Risk: An Analysis of Bank Levy Schemes
with Frederic A. Schweikhard & Mark Wahrenburg

The government actions during the 2007-09 financial crisis have demonstrated that large financial institutions benefit from implicit "too-big-to-fail" (TBTF) guarantees. This paper analyzes the effectiveness of the recent national bank levy schemes introduced in Germany, France, and the U.K. in reducing the social costs incurred by excessive (systemic) risk-taking. Based on a sample of 41 large European and U.S. banks, we compute the retrospective annual tax amounts as if a given levy had applied to all banks throughout the period 2007-10. The contributions are then contrasted to the cash value of the funding cost advantage, the TBTF premium, which is estimated both from rating-implied bond yields and a structural model of default risk. The results suggest that the U.K. and German levies perform similarly well, but that all schemes fail to match the amount required for the internalization of the externality. The discriminatory power of the French levy is the weakest.

Government Guarantees and the Valuation of Bank Debt
– A Global Perspective

This paper analyzes the credit spreads of major U.S. and European banks using a structural credit model and aims to explain cross-country differences in the estimates of the magnitude of implicit government support. Our results indicate vast differences across countries. At the peak of the 2008 financial crisis, the guarantee value is positively related to (1) the significance of the banking sector for an economy, (2) a country's level of financial development, (3) the local banking sector concentration, and (4) the amounts countries invested in or committed to bailouts. Further, (5) the bank-to-bond-financing ratio suggests that banks in bank-oriented countries exhibit larger guarantees. On the other hand, (6) sovereign credit risk erodes the guarantee values in cases such as Italy and the Netherlands. These conclusions remain robust after controlling for the shock intensity to the individual banks.

How to Become Too-Big-to-Fail – The Impact of Mergers on Credit Risk
with Frederic A. Schweikhard (Work in progess)

Using deal transaction data for the financial sector, this paper investigates the impact of mergers and acquisitions on the borrowing costs and credit insurance premiums of acquirers and targets. We find that M&A activity indeed reduces credit spreads, most notably in the case of the bidding firms. A further examination of the abnormal returns reveals their relationship with firm size and systemic risk and thus supports the notion that as firms grow they gradually become "too big to fail" as per the market's perception.