



FAKULTÄT FÜR
WIRTSCHAFTSWISSENSCHAFT

Forschungsbericht 2016

Lehrstuhl BWL, insb. Finanzierung und Banken

LEHRSTUHL BWL, INSB. FINANZIERUNG UND BANKEN

Universitätsplatz 2, 39106 Magdeburg
Tel. +49 (0)391 67 18412, Fax +49 (0)391 67 11242
<http://www.finance.ovgu.de/>

1. Leitung

Prof. Dr. Peter Reichling

2. HochschullehrerInnen

Prof. Dr. Peter Reichling

3. Forschungsprofil

1. Performancemessung
 - Bestimmung eines unverzerrten Maßes zur Performance-Attribution
 - Performance von Minimum-Varianz-Strategien
2. Bewertung von Krediten und Kreditderivaten
 - Bestimmung des Spreads für bonitätsrisikobehaftetes Fremdkapital
 - Unternehmensbewertung bei Ausfallrisiko
3. Informationseffizienz von Ratings
 - Rating-Accuracy
 - Vorhersagekraft von Ratings und Volatilitäten

4. Forschungsprojekte

Projektleitung: Prof. Dr. Peter Reichling

Projektbearbeitung: M. Sc. Mohammadjavad Moshefi

Förderer: Haushalt; 03.02.2014 - 27.02.2016

Concentration Risk and Banks Performance

The Asymptotic Single Risk Factor (ASRF) model underpinnings of the Internal Ratings-Based (IRB) capital rules presume that the bank portfolio is fully diversified with respect to individual borrowers. When there are material name concentrations of exposure, there will be a residual of undiversified idiosyncratic risk in the portfolio, and the IRB formula will understate the required economic capital. This form of credit concentration is sometimes known as lack of granularity. The aim of the project is to empirically measure granularity adjustment and compare it with other model based and ad-hoc measures of name concentration and also to develop a model to improve banks performance taking granularity adjustment into consideration.

Projektleitung: Prof. Dr. Peter Reichling

Projektbearbeitung: M.Sc. Anastasiia Zbandut

Förderer: Land (Sachsen-Anhalt); 01.09.2016 - 01.02.2018

Cost of Capital under Credit Risk

Company valuation is based on determining cost of capital. Cost of capital equals the opportunity cost of an alternative investment on the capital market. This project looks at the first steps of company valuation by ignoring taxes. For the estimation of cost of capital of non-publicly traded companies, the required equity return of a levered company is needed which can be found with a help of the Capital Assets Pricing Model (CAPM). In case of credit risk, the basic leverage formula has to be adjusted by the risk premium of debt in order to estimate required returns on assets and debt by the help of respective betas. For a non-publicly traded company the debt beta formula is also needed for the unlevering-re-levering procedure. This approach assumes a generalized market portfolio that consists of both stocks and corporate bonds. The aim of this project is to show that the debt beta approach causes serious distortion and to apply an option approach to determine cost of capital.

Projektleitung: Prof. Dr. Peter Reichling
Projektbearbeitung: M. Sc. Gordon Schulze
Förderer: Haushalt; 01.10.2014 - 30.09.2017

Four Essays in Performance Measurement

The scope of the project covers theoretical and empirical research to current topics of performance measurement. The consistent application of downside-oriented performance measures when transferring the Sharpe characteristics will be examined as a first step. In an empirical analysis, the efficiency of German savings banks will be investigated concerning regional differences. Another empirical essay strives to explain potential risk-adjusted outperformance of yield curve strategies. The project concludes with investigating the performance of constant proportion portfolio insurance strategies with respect to their timing component.

Projektleitung: Prof. Dr. Peter Reichling
Projektbearbeitung: M. Sc. Lilija Velieva
Förderer: Haushalt; 01.07.2012 - 30.06.2016

Moral Hazard and Credit Risk

Credit risk is a function of both quantitative and qualitative factors. While quantitative factors aim to analyze financial ratios, qualitative factors deal with soft characteristics including moral hazard which originates from information asymmetry. The scope of moral hazard does not only affect the qualitative factors but can also include the manipulation of quantitative factors. Starting from rational behavior it is less likely to assume opportunistic actions in the long run within the debt holder-equity holder conflict. Thus, the incentives of banks and other investors to minimize the potential for moral hazard should become insignificant. There are two possible scenarios in repeated interactions: Change in credit risk is due to unfaithful behavior or due to better or worse market situation. Both scenarios can also appear simultaneously and reinforce or weaken the credit risk changes. The aim of the project is to analyze the credit risk sharing and identify which (combination of) scenario(s) is more likely. It is necessary to define appropriate measures for moral hazard and empirically test its existence in the long run, i.e. repeated interactions between bank and publicly listed firms. Furthermore, collateral and covenants are considered in this context since their inclusion supposed to reflect the uncertainty about creditworthiness.

Projektleitung: Prof. Dr. Peter Reichling
Projektbearbeitung: M. Sc. Benedikt Hoechner
Förderer: Haushalt; 01.05.2015 - 25.11.2019

Performance Measurement and Risk Controlling for Alternative Investments

Finance as the technology of transferring wealth efficiently through time has created many tools to measure the performance and riskiness of investments. This research project investigates the measures in which we quantify and ultimately compare performance and riskiness of investments.

Another focus of this research is the application of the aforementioned tools and measures for alternative investments. In recent years we can observe a development that is often called financialization of commodities, which is another way of describing the fact that the instruments of financial markets are being transferred to commodities as oil, copper, cocoa and even electricity. This project wants to contribute to the question how these commodities can be integrated in investors portfolio and what kind of effects this has with respect to diversification. A special interest also the question, how the tools of financial markets can be used for decentralized, renewable energy markets.

Projektleitung: Prof. Dr. Peter Reichling

Projektbearbeitung: M. Sc. Robin Enke

Förderer: Haushalt; 16.10.2014 - 15.10.2017

Stabilität von Markteffizienz in turbulenten Zeiten

Der Markt für Staatsanleihen von Mitgliedern der europäischen Währungsunion ist mit einer Marktkapitalisierung von ca. 7 698 Milliarden Euro (Q2 2016, Eurostat) einer der wichtigsten internationalen Kapitalmärkte und vor dem Hintergrund jüngsten Wirtschafts- und Finanzkrise von großer politischer Bedeutung. Obwohl der Grad an Effizienz dieses Markt in der einschlägigen Literatur und eigenen empirischen Untersuchungen als sehr hoch eingestuft wird, können nicht alle beobachteten Phänomene durch die klassischen Ansätze in den Lehrbüchern erklärt werden. Im Forschungsprojekt werden unerwartete Effekte im Handel auf dem Primär- und Sekundärmarkt für in Euro gehandelte Staatsanleihen analysiert. Bisherige Ergebnisse geben Hinweise auf ein möglicherweise strategisches Verhalten der Akteure in bestimmten Teilen des Marktes, wobei zur Erklärung der Beobachtungen auch auf spieltheoretische Ansätze eingegangen wird.