Prof. Dr. Markus Rudolf
WHU – Otto Beisheim School of Management
Allianz Endowed Chair of Finance

THEMENVORSCHLÄGE FÜR ABSCHLUSSARBEITEN BSc 2020
THESIS TOPIC SUGGESTIONS BSc 2020

Liebe Studenten,

neben den unten genannten Themen können Sie gerne ein eigenes Thema für Ihre Abschlussarbeit vorschlagen. In Bezug auf das Schreiben einer Abschlussarbeit in Kooperation mit einem Unternehmen, behält sich der Lehrstuhl vor, die Auswahl der Studenten gemäß Qualifikation zu treffen. Die Themenübersicht wird aktualisiert, falls wir weitere Themen von den Unternehmen erhalten. Wir wünschen Ihnen viel Erfolg und freuen uns auf Ihre Bewerbung.

Dear students,

In addition to the topics listed below, you may propose your own thesis topic. For theses written in cooperation with a company, the Chair will select the students based on qualification. The topic proposals will be updated, if we receive additional topic suggestions by partner companies. We are looking forward to receiving your application.

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THEMENVORSCHLÄGE VON PARTNERUNTERNEHMEN
THESES TOPICS PROPOSED BY PARTNER COMPANIES

Allianz Global Investors

1) ESG Based Investing

ESG has been one of the most discussed topics in the investment world in the last year. Thus, financial companies would like to know, how do retail investors care about the topic?
First, the thesis should examine which investment products that look at ESG are offered in the market, and how companies offering these products report about ESG. Second, a comparison of a small number of portfolios with/without ESG shall be performed along the efficient frontier (e.g. mid-risk-portfolio without ESG, ESG portfolio with same risk as a portfolio without ESG, ESG portfolio with same return as portfolio without ESG, inefficient ESG portfolio). Third, a brief survey should be conducted to examine, which portfolio investors would choose and why. Does the presentation of ESG criteria which was analyzed at first play a role in decision making?

2) Goal-based Investing

Goal-based investing is a relatively new approach to wealth management that emphasizes investing with the objective of attaining specific life goals, e.g. saving up for retirement or a house. First, a systematic overview of the market should be provided. Who are the companies that offer goal-based investing and how does their offer look like? How do they present goal-based investing vis-à-vis their customers? Second, the different aspects influencing the goal attainability should be identified (e.g. sum to be invested, investment horizon, risk taking ability). How can one present these intertwined aspects adequately to the customer? Possible solutions should be generated and discussed.

BÖKER & PAUL

3) Empirical Analysis of Crossover Trading Strategies

In the light of financial crises in the past two decades, the role of active risk management became ever more vital for the portfolio management industry. The aim of this thesis is to assess the statistical properties of long-term trading strategies or portfolios which are based on well-known indices such as the MSCI World Index or the S&P 500. Specifically, the student has to investigate the properties of trading strategies based on rolling moving averages, MACDs, among other trading signals, and compare them with traditional buy and hold strategies such as value- and equally-weighted portfolios. Furthermore, the study should discuss the advantages as well as the disadvantages of implementing such strategies and how such strategies get influenced by market environments or regime changes.

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4) Are Sentiment Data Suitable as Timing Instruments for Portfolio Decisions?

Numerous studies have investigated the role of investor sentiment and risk preferences on asset prices. The aim of this paper is to investigate how investor sentiment can be utilized as indicators that influence portfolio managers' investment decisions. Accordingly, the study should discuss the impact of sentiment data on asset prices and whether alpha can be generated from the resulting mispricing of such assets. Furthermore, the student should propose a timing strategy that employs sentiment data such as the Fear and Greed Index, historical volatility or the VIX Index, or the put-call-ratio of securities to shift or rotate allocations among assets.

5) Passive vs Active Asset Management: The Role of Liquidity Crises

Since the financial crisis of 2008, the role of passive investing and more prominently Exchange Traded Funds (ETFs) has been increasing exponentially. In contrast to active investing which attempts to pick stocks and time the market, ETFs are products that replicate a broad market index such as the S&P500 and focus on optimizing rebalancing frequencies and transaction costs. Recently, the Bundesbank issued a report highlighting the market risks and threats facing capital markets in the rise of passive investing. The aim of this thesis is to investigate the advantages and disadvantages of passive investing in terms of changes in liquidity risk, market risk, and interest rate risk, among others. The student should summarize the findings of existing literature and debate whether passive investing positively or negatively influences financial markets and draw a brief conclusion of how financial markets could change given this new paradigm of investing.

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THEMENVORSCHLÄGE DES LEHRSTUHLS
THESES TOPICS PROPOSED BY THE CHAIR

6) Defining Research Excellence across Academic Disciplines (Sebastian Seidens)

The thesis sets out to conduct research on the different academic disciplines. Thereby the student could work with the *Scimago Journal & Country Rank (SJR)* database. The aim of the thesis is to develop a research-based approach to comprise a list of journals that could be considered as leading in the respective fields. The main categories could be defined as: Humanities, Social Science, Natural Science, Formal Science and Applied Science. Each of these fields has subcategories that could be attributed to the former. The thesis could analyse trends and developments in the "Impact Factor" of the different journals across time and create a list of the most important journals by discipline. The student has open access to the data required in order to conduct the study.

7) Performance Analysis of Popular Multi-Asset Strategies (Nabil Alkafri)

Multi-asset strategies are successfully gaining ground within institutional portfolios, and their role is likely to grow. This is no mean accomplishment— institutional portfolios are typically well – tuned structures that require reshaping to accommodate additional strategies. According to a report by McKinsey & Company in 2014, assets allocated to multi-asset strategies are expected to increase by an estimated 10% annually over the next several years, making it one of the most rapidly growing investment approaches in the United States. A Greenwich Associates study of U.S. institutional investors commissioned by Standard Life Investments underlines the many benefits of multi-asset strategies, such as the potential for improved diversity, greater liquidity, and reduced volatility. Another advantage is their ability to fit readily alongside a variety of investment approaches and asset class categories. The aim of this study is to assess and compare the properties of the most popular weighting schemes in the field of multi-asset investing such as equal-weighting, minimum variance, 60/40 stock-bond funds, and risk parity, among others. Specifically, the study should investigate how these strategies vary in terms of risk exposure and enhancement of returns according to variety of measures and in different market conditions.

Reference Literature:

- Baghai, P., O. Erzan, K. MacAlpine, F. Morin, and N. Szmolyan (2014) "The New Imperatives: Gaining an Edge in North American Asset Management." McKinsey & Company.

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- Bessler, W., and Wolff, D. (2015). Do commodities add value in multi-asset portfolios? An out-of-sample analysis for different investment strategies. Journal of Banking & Finance, 60, 1-20.
- Peskin, S (2017) „Evaluating Multi-Asset Strategies" The Journal of Portfolio Management 44 (2), 40-49.

8) Are Daily Winners and Losers Overpriced? (Nabil Alkafri)

Barber and Odean (2008) suggest that investor attention to certain stocks causes net buying of these stocks by retail investors, and consequently a temporary positive price impact of investor attention. They find evidence in support of increased buy-sell-imbalances for high-attention stocks. As a proxy for high attention, they use extreme returns, trading volume, and news coverage. Da et al. (2011) measure investor attention more directly, using Google search volume for tickers (e.g. AAPL for Apple). They find evidence in support of the price impact and reversal pattern suggested by Barber and Odean (2008). Hence, it seems that investor attention has an effect on stock returns. One potential attention-causing event is the inclusion of a stock in the daily winners and losers (the top/bottom 10 to 100 stocks). These stocks are easy to identify, since webpages provide lists:

- http://finance.yahoo.com/market-overview/
- http://boersen.manager-magazin.de/spon/aktien_topflop.htn
- Newspapers like the Wall Street Journal or the New York Times also provide lists of these stocks (the 'Percentage Gainers and Losers').

The goal of this study is to analyze potential price impact and reversal patterns caused by a stock's winner or loser status. Are these stocks overpriced due to the attention caused by being a winner or loser? How is this effect related to the idiosyncratic volatility puzzle (for an overview, see Hou and Loh, 2016)?

Reference Literature:

- Barber, B.; Odean, T. (2008): All That Glitters: The Effect of Attention and News on the Buying Behavior of Individual and Institutional Investors, The Review of Financial Studies 21 (2), 785-818.
- Da, Z.; Engelberg, J.E.; Gao, P. (2011): In Search Of Attention, The Journal of Finance 66 (5), 1461-1499.
- Hartzmark, S.M. (2014): The Worst, the Best, Ignoring All the Rest: The Rank Effect and Trading Behavior, The Review of Financial Studies 28 (4), 1024-1059.
- Hou, K.; Loh, R. K. (2016). Have we solved the idiosyncratic volatility puzzle? Journal of Financial Economics, 121 (1), 167-194.

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9) Are Factors that Have Shown Persistent Predictive Power in Equities also Suitable in Cryptocurrency Markets? (Tobias Burggraf)

A series of studies have investigated the predictability of Bitcoin. Urquhart (2016) firstly indicates the inefficiency and predictability of Bitcoin, contradicting the Efficient Market Hypothesis (EMH). This finding has been supported in the literature by Nadarajah and Chu (2017), Tiwari et al. (2018) amongst others. Recently, Wei (2018) examines 456 different cryptocurrencies and shows that the less efficient the cryptocurrency is, the more illiquid the cryptocurrency. A thesis could examine other factors in the cryptocurrency market and investigate, whether factors that have shown persistent predictive power in equities, are also suitable in cryptocurrency markets. For example, one might investigate a simple three-factor pricing model, consisting of market, size and reversal factors, to model a large portfolio of cryptocurrencies. In a second step, the student could then test whether this three-factor model outperforms a simple one factor cryptocurrency CAPM (CCAPM) model proxied by the cryptocurrency market, which might consist of a market capitalization weighted portfolio.

Reference Literature:

- Urquhart, Andrew, The Inefficiency of Bitcoin (August 24, 2016). Available at SSRN: https://ssrn.com/abstract=2828745 or http://dx.doi.org/10.2139/ssrn.2828745
- Nadarajah, Saralees & Chu, Jeffrey, 2017. "On the inefficiency of Bitcoin," Economics Letters, Elsevier, vol. 150(C), pages 6-9.
- Wei, Wang. (2018). Liquidity and market efficiency in cryptocurrencies. Economics Letters. 168. 10.1016/j.econlet.2018.04.003.