## **University of Zurich**

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# "Day of the week effect" on the returns of the Swiss Market Index (SMI) in the time period between 2005 – 2015

#### Bachelor thesis

Field of Study:

Banking and Finance

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### **Executive Summary**

#### I Problem of Statement

Asset returns can be linked to many so-called calendar anomalies. This thesis focuses on one potential anomaly and examines if asset returns differ depending on the day of the week. Subsequently, it is tested if the risk-adjusted asset returns are different based on the respective weekday by calculating the daily Sharpe ratio of the corresponding asset. Therefore, this thesis examines if there indeed is a "day of the week effect" on the Swiss stock market as measured by the Swiss Market Index (SMI). In order to consider dividend payments, the SMI used in this thesis is always based on the adjusted SMI which includes dividends (SMIC)

#### II Aim of Research

First, the aim of this thesis is to check if the daily returns of the SMI in the time period from 2005 to 2015 differ by weekday. Second, this thesis assesses if the Sharpe ratio of the SMI returns from different weekdays in the time period from 2005 to 2015 differ depending on the day of the week. It is therefore tested if the risk-adjusted returns of the SMI in the time period from 2005 to 2015 differ depending on the day of the week. Both examined variables are measured over the total time period (2005-2015), over three smaller sub periods (2005-2007, 2007-2013, and 2013-2015), and for each year individually. This is done in order to check if the financial crisis of 2007/2008 had an impact on both variables and if the effect is consistent over time.

#### **III Methodology**

To examine whether the daily returns of the different weekdays of the analysed SMI within the time period from 2005 to 2015 differ from each other, an Anova test, a regression test (which is followed by the Breusch-Pagan test for heteroscedasticity), and a rolling sample test are applied. To check if the different observed weekdays show different daily Sharpe ratios for the underlying asset returns, an Anova test is performed.