My first article

This is our first article using Latex

Digital Tools for Finance

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Abstract

The purpose of this report is to examine the risk and return relation in the Swiss stock market. To reflect the Swiss stock market, the Swiss market index (SMI) has been chosen as the index of reference. This report is divided into three parts: Risk and Return, Portfolio Construction and Variance Ratios. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

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1 Introduction

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2 Literatur Review

Milgrom and Weber (1982) and Gormsen and Koijen (2020) argue Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

3 Results

Table 1: Expansion coefficients

\overline{n}	$\nu = 1/3$	$\nu = 1/5$	$\nu = 1/7$
1	200.644	-3.53	-3.73132
2	1.002223	2.83	30.4643
3	0.0613	-1.8256	-3.09032
4	-0.410	0.7144	2.45
5	0.39283	0.167333	-1.5920
6	-10.25	-0.6858	0.6627
7	0.1225333	0.8	0.1630234

Table 2: Value Portfolio

	01.01.1998	01.01.2008
Nestle	Growth	Growth
Roche	Growth	Growth
UBS	Value	Growth
Novartis	Growth	Growth

Note: Data collected using Bloomberg terminal.

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Figure 1: Procedure of each treatment

Market phase 2 phase 3 phase 4 phase 5

Merger phase 1 Merger phase 2 phase 3 Merger phase 4

Note: Merger to monopoly not possible. In addition, only one merger phase allowed.

Figure 2: Plot with 4 lines, colorblind-friendly

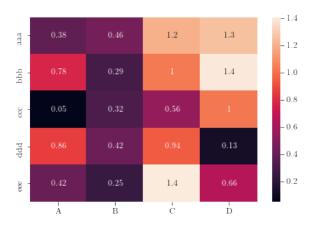
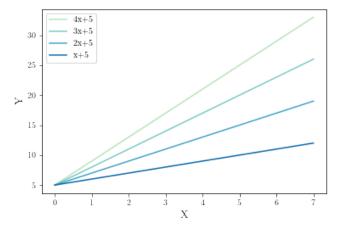


Figure 3: Plot with 4 lines, colorblind-friendly



4 Discussion

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5 References

Gormsen, Niels Joachim and Ralph S. J. Koijen (2020). "Coronavirus: Impact on Stock Prices and Growth Expectations". In: *University of Chicago*, *Becker Friedman Institute for Economics Working Paper* (2020-22).

Milgrom, Paul R. and Robert J. Weber (1982). "A Theory of Auctions and Competitive Bidding". In: *Econometrica* 50(5), p. 1089.