Finsearch'23 - Endterm Report

Portfolio using Momentum Strategy

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Buy cheap; buy strong; hold 'em long.

Contents

1   Introduction

Optimise Investment Returns using a Momentum-Based Portfolio Strategy was one of the topics under Finsearch'23 conducted by Finance Club, IIT Bombay.

It was a comprehensive, over two month long project, where every group of mentees was provided with ample resources - including books and research papers, and was encouraged to test the practicality of the suggested trading algorithms in context of the Indian Stock markets.

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We then explore the individual and institutional behavior biases which allow momentum strategies to capitalize on market mispricings, and argue that it always generates opportunities for process-driven, long-term focused, disciplined investors. We also discuss how momentum trading is not a competitor to value investing, but a close counterpart instead. [3]

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2   Aim and Roadmap

Project Structure

The project is subdivided into 3 parts -

1. Developing an understanding about momentum trading strategy

2. Building and testing such strategies in Indian Stock markets

3. Evaluating the strategy and risk analysis

While building our strategy, these are the ideas we focus on -

1. Construction of momentum portfolio (deciding look-back and holding period)

2. Selecting "smoother" stocks

3. Considering the seasonality effects in trading

4. Balancing profit and transactional costs

5. Reducing risk aversion by diversification

Timeline

The suggested timeline was as follows -

- **Week 1 - 2:** Read about fundamentals of momentum strategies and understand how they work.

- **Week 3:** Build a trading strategy and evaluate various momentum scenarios.

- **Week 4 - 5:** Backtest strategy on 2010-19 trading data of NSE Nifty50 Companies.

- **Week 6:** Understanding mean revision.

- **Week 7 - 8:** Interpret obtained results and present conclusion as report.

At the end, we also had to create a short video explaining our project and presenting our own conclusions.

3 What is Momentum and Why it works

4   Developing a Momentum Strategy

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7   Results and Conclusion

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