

The Design, Testing, and Validation of Trading Systems

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January 17, 2008

Questions:

Assume you get a buy signal from one of your trading systems today.

- Is your comfort level in taking the trade high (10) or low (1)?
- Do you know the expected percentage profit of this trade?
- If this trade is a loser, is your system broken?

Objective of the Workshop

Learn to develop mechanical trading systems using AmiBroker that you will be comfortable with and that have a high probability of being profitable

Outcomes

- Increase your trading system development experience
- Increase your comfort level with your trading systems
- Increase your understanding of your systems and their behavior

Four Key Points

- Define your objective function before you start designing or testing
- Only out-of-sample results can be used to judge likely system performance
- Use walk forward testing
- Apply statistical validation

Syllabus

Introduction to:

- AmiBroker
- Data and data suppliers
- Mechanical trading systems

One time tasks:

1. Objective functions (Key Point 1)
2. Issue selection
3. What to model
4. What to trade

Trading system development tasks:

5. Entries
6. Exits
7. Systems
8. In-sample / out-of-sample (Key Point 2)
9. Optimization
10. Walk forward testing (Key Point 3)
11. Validation (Key Point 4)

Trading tasks:

12. Anticipating signals
13. Trading
14. Monitoring results
15. Equity curve analysis

Prerequisites

- Familiar and comfortable with AmiBroker
- Able to understand and write afl code
- Understand and use optimization
- Have a laptop computer with AmiBroker and end-of-day data

Disclaimer

- This is an educational workshop
- The goal is to teach you how to develop your own trading systems
- This workshop is not a trading workshop

Course Materials

- You will receive at the presentation:
 - Workbook with handouts
 - CD with data and afl code
- You will prepare during workshop:
 - Trading system of your design
- You will receive after the presentation:
 - DVD with Camtasia recording of workshop
 - Compilation of class trading systems

Workshop Protocol

- 8AM to 5PM, Thursday and Friday
- Short introductory lecture about trading systems
- A lot of hands-on exercises
- Help your neighbor
- Stay on topic
- Continue at lunch and dinner, if interested
- Give me feedback – level, length, detail