FTS Interactive Markets

• Markets with price discovery
  • Students bid, ask, buy, sell in a continuous double auction
  • a “true market” in that you cannot trade unless someone else in the market is willing to trade with you

• Based around trading cases
  • Describe the environment, trading and learning objectives
Requirements

– Install the FTS System Manager, available at www.ftsmodules.com

– This must be done on every computer running the system

– PLUS: Port 26888 must be open for two-way communication between all computers in the room
FTS Interactive Markets

• Moderator runs the **FTS Market** from the *FTS System Manager*
  – Selects the trading case
  – Allows connections (by students)
• Each student runs the **FTS Trader** from the *FTS System Manager*
  – Connects to the market

• Trading starts when moderator allows it
• All output is stored in a spreadsheet, easy to provide feedback or data for analysis
Instructor

- Run the FTS System Manager
- Click “Moderator Applications”
Instructor

– Enter your moderator password in the little popup window
  • If you don’t have a password, please contact FTS
Instructor

Select the FTS Market Version X and click “Run Selected Application” The version numbers change as we add features, so just run the latest version.
Instructor

- Once the application launches, the case selection window of the FTS Market will appear.
Instructor

• Select the subset of cases you want to download
  – Or, you can download All Standard Cases
  – You can also read in cases that you have saved on your computer
Instructor

• Click Download Cases

• Select the case and click OK
  – Answer questions that appear next (click No to keep defaults)

• In the window that appears next, click “Allow Connections”
Instructor

- The main market window will appear
- Note the IP address at the top
  - Tell this IP address to every student, they need to know this to connect to the market
Once students have connected to the market, click Start to open the trading:

- You can pause/resume the trading, end a trading period.
- After this, follow the instructions in the status box.
Select FTS Market Version 8.X, then Run Selected Application

Download cases from ftsweb.com

Select Case and click OK

Click OK when asked, then Allow Connections

Wait for students to connect; they will need the IP address

Click Start to open the market

Follow instructions on screen
Students

– Select and Run the FTS Trader Version X from the System Manager

– They will need:
  • The IP address of the instructor’s computer
  • A trading name (they can use their university email address or the instructor can assign each student a unique trading name)
Students

- Enter the IP Address of the instructor’s computer and the trading name, then click Connect to the Market
Students

• The trading window for the students will appear
  – They trade:
    • Place bids and asks, hit bids and asks of others
    • The top right panel lets them enter their quotes and trades
    • They can also use the hand signals
Students
Student Practice

• We run a demo all the time of case B02
• It has prices and trades from a previous session
• You can interact
  – Enter quotes, trade
  – Practice all the mechanics
Student Practice

• In a web browser, go to
  – www.ftswebtrader.com
  – Click Connect to Demo on the web page:
Running a continuous practice market

- You can run your own “unattended” market that runs all the time and that students can log in out as they want
  - Run a market as usual
    - Require students to login with the first part of their email address, so when they login again, they re-use their trading name
      - If they login with a different name every time, you will soon exceed the maximum number of traders
  - Start the market
  - From the Market’s Options menu,
    - Check on “Cycle mode”
      - This means that when it reaches the end of the trials, its starts over with trial 1
    - Check on “Auto mode”
      - This means that you don’t have to click Initialize or Start in between periods
    - Check on “Don’t write trading history”
      - Otherwise your output spreadsheet can get very large
  - The market will now run keep running, students can login and logout, and practice any case you want.
Trading Basics: Bids

• A bid is an offer to buy
  – The highest bid is the most anyone is willing to pay
    • The highest bid is shown in the montage

– If someone else posts a bid, what can I do?
  – I can sell to them if I think the price is high enough
  – I can raise the bid if I am prepared to pay more

– If I post a bid, what can happen?
  – Someone else can hit my bid, so they will sell to me and I will buy
  – They can raise the bid if they are prepared to buy at a higher price
The Basics: Bids

- Everyone put in a bid
  - Click on a security name, then enter a price and a quantity, then click Submit Bid

- See the bids in the book

- Sell to the bid
  - Enter a quantity, click Sell to Bid
The Basics: Bids

- Best bid is shown in the montage
- Buttons provide an easy way to trade
  - Click on the arrows to raise the bid
  - Double click on the cell to sell to the bid
  - Your position will change as you trade, and you can see the last traded price next to it
The Basics: Asks

- An ask is an offer to sell
  - The lowest ask is the least anyone is willing to get
    - The lowest ask is shown in the montage

- If someone else posts an ask, what can I do?
  - I can buy from them if I think the price is low enough
  - I can lower the ask if I am prepared to accept less

- If I post an ask, what can happen?
  - Someone else can hit my ask, so they will buy from me and I will sell
  - They can lower the ask if they are prepared to sell at a lower price
The Basics: Asks

- Everyone put in an ask
  - Click on a security name, then enter a price and a quantity, then click Submit Ask

- See the asks in the book

- Buy from the ask
  - Enter a quantity, click Buy At Ask
The Basics: Asks

- Best ask is shown in the montage
- Hand signals provide an easy way to trade
  - Click on arrow to lower the ask
  - Double click in the cell to buy at the ask
  - Your position will change as you trade, and you can see the last traded price next to it
Practice Trading

• Enter bids and asks
  – Hand signals can be used to quickly raise bids (hand pointing up)/lower asks (pointing down)

• Sell to the bids and buy at the asks of others
  – See how your position changes
  – See how your cash changes

• At the end of the period
  – Interest is paid on cash
  – Then any payoffs from the securities are distributed
    • E.g. coupon payments, dividends
  – All this is added to your cash

• At the end of the trial
  – After interest and payoffs, your cash is converted to “grade cash”
    • E.g. grade cash = 0.1 * cash
Practice on your own

- Using the case B02 demo, select the Excel link from the File menu
- Learn how to use this from the Student Preparation Manual
- Follow the instructions for case B02 in the manual
Instructor Suggestion

• In the class before you run a trading case, run a practice session
  – Explain the case
  – Run one trial so everyone sees the screen
  – They can create an Excel template during that trial
    • So pause the market, give them time to create the Excel link and save the spreadsheet
  – Students work on the spreadsheet and any other case preparation
  – In the next class, run the case
Contact Us

• If you have questions about how to run a case or questions about a case, or if you want to modify a case, contact us:

ftsweb@gmail.com