In the FTS Interactive Markets, students trade with each other in specially designed markets that tie a central function of markets, price discovery, to concepts being taught.

The FTS Interactive Markets consist of a set of trading cases and a trading system designed to teach how financial markets work. Students become financial market participants whose task is to discover the prices of the securities being traded. What they trade and the learning objectives are specified in a trading case. Each case is designed so that the price discovery problem is linked directly to the teaching objectives of the case. We offer over thirty tried and tested trading cases as well as the ability to create your own cases. You can run different microstructure treatments: a double auction market, quote and order driven markets, as well as call markets.

Participation in the market leads to an understanding of:

- market impact and price discovery
- the informational role of markets
- security valuation
- risk return tradeoffs
- the role of future cash flows
- opportunity costs
- arbitrage
- expectations
- attitudes toward risk

The standard cases are:

Fixed Income Cases	Market Efficiency, CAPM Diversification and CAPM	Binomial Option Cases	Option Hedging Cases	Index Futures, Covered Interest Parity, Swap Cases
Case B01	Case RE1	Case OP1	Case ST1	Case IN1
Case B02	Case RE2	Case OP2	Case ST2	Case IN2
Case B02A	Case RE3	Case OP3	Case XR1	Case FX1
Case B03	Case CA0	Case OP4	Case XR2	Case FX2
Case B03A	Case CA1	Case OP9	Case RM1	Case SW1
Case B04	Case CA2			
Case B05	Case CA3			
Case B06				

The first case in a series is usually quite simple, and the cases increase in complexity. We also have a collection of many additional cases, usually created in response to an instructor's need, and we also help create cases for instructors interested in exploring topics not covered by our standard cases.

As an example of a teaching sequence, consider four aspects of the price discovery process covered by cases B01, RE1, CA1, and OP1:

- discounting of future cash flows
- information aggregation
- determination of risk premiums
- arbitrage

In a "real market," prices react to expectations of future cash flows and information. Together with risk attitudes, risk premiums are determined. Finally, especially in derivative markets, arbitrage relationships affect prices.

In case B01, the only issue is the time value of money (there is no uncertainty), so the price discovery problem is simple: the value today must reflect the present value of future cash flows. In RE1, traders have private information about the values of different stocks, and so price discovery is affected by the distribution of information, the usefulness of the information, and the ability of traders to infer what they don't know. In CA1, we abstract away from the time problem and the information problem and focus on the determination of risk premiums; there are (correlated) risky cash flows for different companies, and the traders determine the prices. These prices reflect risk aversion; from these, we can calculate the risk premiums, and relate the trading results to the CAPM, providing a tight link between the theory and actual market experience. Case OP1 is a simple binomial option pricing case, and the option prices can be determined using arbitrage arguments as taught in standard courses.

The remaining cases extend these ideas, and also bring in a variety of other concepts, such as hedging and risk management, including case RM1 which is quite an advanced risk management exercise. The concepts covered by the standard cases are listed below.

In most of our cases, the order flow is endogenous. The trading case summarizes the environment and creates gains from trade, so all the price and volume activity is generated by the participants. So a standard exercise is not so much about "how to execute a large order" or forecasting a price path, it is more about understanding how a market works and the implications for valuation, portfolio management, etc. Having said that, the system allows these features, and we have, and can create, cases with exogenous order flows and exogenous price paths. You can also let students experience different market types, such as call markets, the (default) double auction market, even a completely non-transparent private trade market, in which every trade is privately negotiated; with each variation, your students can experience the effect of the market structure on price discovery.

The next few tables show the concepts covered by the standard cases.

	BO1	BO2	BO2A	BO2R	BO3	BO3A	BO4	BO5	BO6
Opportunity Cost of Capital	X	X	X	X	X	X	X	X	X
Arbitrage	X	X	X	X	X	X	X	X	X
Price Discovery	X	X	X	X	X	X	X	X	X
Time Value of Money	X	X	X	X	X	X	X	X	X
Future Spot Rates and Bond Prices	X	X	X	X	X	X	X	X	X
Price and Spot Rates by Maturity		X	X	X	X	X	X	X	X
Cash Matching		X	X	X	X	X		X	X
Trading Forward Rates					X	X		X	X
Synthetic Security					X	X		X	X
Interest Rate Uncertainty			X	X		X	X	X	X
Bond Quotations: T-Bills				X					
Bond Quotations: T-Notes				X					
Private Information/ Market Efficiency			X	X		X			X
Public Information/Fixed Income Market Efficiency									
Term Structure of Interest Rates		X	X	X	X	X	X	X	X
Duration and Convexity							X		

	RE1	RE2	RE3	CA0	CA1	CA2	CA3
Dividend Model	X	X	X		X	X	X
Efficient Markets Hypothesis	X	X	X		X	X	X
Arbitrage and Efficiency		X	X		X	X	X
Diversification				X	X	X	X
CAPM- Trading in a Risk Averse World				X	X	X	
CAPM- Trading in a Low Risk WORLD							X
Intrinsic Value: Abnormal Growth Model	X	X	X				
Impact of the Yield Curve on Stock Prices	X	X	X				

	SW1	RM1
Financing Decision	X	X
Libor	X	X
Variable Rate/Fixed Rate	X	X
Swaps	X	X
Risk Management	X	X

	IN1	IN2	FX1	FX2	XR1	XR2	BO3	XR1	XR2
Cost of Carry Model and Synthetic Forwards	X	X	X	X	X	X	X		
Forward Price versus Forward Value	X	X	X	X	X	X	X		
Arbitrage Pricing	X	X	X	X	X	X	X		
Basis, Contango and Backwardation	X	X	X	X	X	X	X		
Arbitrage and the Bid/Ask Spread	X	X	X	X	X	X	X		
Hedging Fundamentals		X	X	X	X	X		X	X
Interest Rate Forwards					X	X			
Stock Index Forwards/Futures					X	X			
Currency Forwards			X	X		X	X		
Currency Futures								X	X
Covered Interest Rate Parity				X					
Interest Rate Risk				X					
Informational Efficiency and Forward Markets		X		X					
Futures and Marking to Market								X	X

	OP1	OP2	OP3	OP4	OP9	ST1	ST2	XR1	XR2	RE3
Information and Option Trading Strategies										X
1-Period Binomial World	X				X					
Synthetic Option (Put/Call)	X	X	X	X	X					
Put Call Parity	X	X	X	X	X	X	X	X	X	X
Risk Neutral versus Empirical Probabilities	X	X	X	X	X					
Exogenous Underlying Price	X	X	X	X	X	X	X	X	X	
Simultaneous Price Discovery in the Underlying					X					
Risk Management Objective						X	X	X	X	
Multi-Period Binomial World		X		X						
American Options		X								
Delta Hedging			X	X						
Black Scholes World						X	X	X	X	
Black Scholes OPM						X	X	X	X	
Applying the "Greeks"						X	X	X	X	