AUTOMATIC FINANCIAL INSTRUMENT TRANSACTION SYSTEM

[0001] This application claims the benefit of U.S. Provisional Application No. 61/020,138, filed Jan. 9, 2008, U.S. Provisional App. Ser. No. 61/020,374, filed Jan. 10, 2008, U.S. App. Ser. No. 12/014,027, filed Jan. 14, 2008, and U.S. Provisional App. Ser. No. 61/022,591, filed Jan. 22, 2008. Each is incorporated by reference.

BACKGROUND

[0002] This application relates to computer trading systems for financial instruments.

SUMMARY

[0002a] According to a first aspect of the present invention, there is provided a method, including the steps of: by electronic trading system for trading bond future contracts, communicating orders to trade the bond futures contracts among bond futures traders, and receiving acceptances of orders from the traders to result in executed bond futures trades and resultant bond futures positions; and from time to time on a plurality of occasions and under management of the trading system pursuant to a contractual relationship among the traders and the operator of the trading system, by computer purchasing or selling bond positions economically equivalent to a traders' positions in bond futures and relieving the traders of delivery obligations under the bond futures contracts, and later reselling or repurchasing bonds and reestablishing the delivery obligations under the bond futures contracts.

[0002b] According to a second aspect of the present invention, there is provided a method, including: executing, by a computer of a trading system, trades of bond future contracts to establish and sell positions in the futures contracts; after approximately the end of a first trading day, for each of several positions in the bond future contracts held by traders in the bond trading system, by a computer of the trading system: determining a respective bond and a respective price for the bond based on a price of the bond future contract, and transferring the position in the bond future contract into a corresponding position in the respective bonds; and approximately at the beginning of a second trading day, in which the second trading day is the soonest trading day that is after the first trading day, for each of several positions in the bonds, by a computer of the trading system: determining a respective price of the bond and a respective price of the bond future contract, and transferring the position in the bonds back into a corresponding position in a bond future contract.

[0002c] According to a third aspect of the present invention, there is provided a method, including the steps of: during trading days, trading assets of a first type among traders on an electronic trading system; at about the close of trading days, transferring positions held by traders from the first asset type to positions in a second asset type having

similar economic characteristics; and at about the opening of trading days, transferring the traders' positions back from the second asset type to the first asset type.

[0003] Disclosed herein is a computer network to provide redundancy for a first transaction clearing computer. The first transaction clearing computer is a computer for clearing for trades for financial instruments of a first type. The network includes terminals, a second server, and a transaction processor. The terminals are trading stations for traders of the first type of financial instruments. The second server is designed to clear trades of a second type of instrument. The transaction processor is programmed to communicate network messages with the second server to effect trades in the second type of instrument over time, the messages containing data describing transactions in the second instrument having times and prices designed to create the functional effect of holding the first instrument.

[0004] Disclosed herein is a method, and computer apparatus for performance of the method. On an electronic trading system for trading assets of an asset type, trades are executed among traders of assets of the traded asset type, the traded asset type being a derivative of an underlying asset type. From time to time and as a component of the contractual relationship among the traders of the trading system and the trading system itself, traders' positions in the traded asset type are transferred into positions in the underlying asset type for a period of time, and later the positions in the underlying asset claims are transferred back into positions in the traded asset type.

[0005] Disclosed herein is a method, and computer apparatus for performance of the method. During trading days, assets of a type are traded among traders on an electronic trading system. At about the close of trading days, positions held by traders are transferred from the traded asset type to positions in another asset type. At about the opening of trading days, the traders' positions are transferred back from the other asset type to the traded asset type

[0006] Disclosed herein is a method, and computer apparatus for performance of the method. As a systematic feature of a market made by an electronic trading system, and computer apparatus for performance of the method. A first trade is placed with a clearing agent for delivery at a future settlement time; and a second trade opposite the first trade is placed with the clearing agent for opposite delivery at substantially the same future settlement time, thereby netting out the first trade. The offset between the first and second trades is used as a synthesized financial instrument.

[0007] Disclosed herein is an apparatus having a processor and a memory. The memory stores representations of a plurality of positions in a first type of financial instrument. The processor is programmed (a) at a first predetermined time, to convert each position in the first type of financial instrument into a corresponding position in a second type of financial instrument, and (b) at a second predetermined time that is after the first predetermined time, to

convert each position in the second type of financial instrument into a position in the first type of financial instrument.

[0008] Disclosed herein is a method. Trades of bond future contracts are executed on a computer-based apparatus. After a first predetermined time, a plurality of positions in bond future contracts are transferred into corresponding positions in bonds, in which each position corresponds to one bond future contract. After a second predetermined time that is after the first predetermined time, each of the positions in the bonds are transferred back into a corresponding position in a bond future contract.

[0009] Disclosed herein is an apparatus having a processor and a memory. The memory stores representations of a plurality of bond future contracts, in which each futures contract defines a long position and a short position. The processor is programmed to: (a) after a first predetermined time, for each bond future contract, calculate a first price of bonds based on the bond futures contract and enter, with a clearinghouse, a buy trade and a sell trade for the bonds at the first price; and (b) after a second predetermined time that is after the first predetermined time, for each of the buy trades and the sell trades, enter with the clearinghouse, a second sell trade and a second buy trade for the bonds at a second price.

[0010] Disclosed herein is a method, and computer apparatus for performance of the method. Trades of bond future contracts are executed on a computer-based apparatus. After approximately the end of a first trading day, for each of the positions in the bond future contracts, a respective bond and a respective price for the bond is determined based on a price of the bond future contract. The position in the bond future contract is transferred into a corresponding position in the respective bonds. Approximately at the beginning of a second trading day, being the soonest trading day that is after the first trading day, for each of the positions in the bonds, a respective price of the bond and a respective price of the bond future contract are determined, and the position in the bonds is transferred back into a corresponding position in a bond future contract.

[0011] The above advantages and features are of representative embodiments only, and are presented only to assist in understanding the invention. It should be understood that they are not to be considered limitations on the invention as defined by the claims. Additional features and advantages of embodiments of the invention will become apparent in the following description, from the drawings, and from the claims.

DESCRIPTION OF THE DRAWINGS

[0012] **FIG. 1a** is a diagram of entities in an automated trading system.

[0013] **FIG. 1b** is a diagram of flows and states in an automated trading system.

[0014] **FIG. 2** is a display from an automated trading system.

[0015] **FIG. 3** is another display from an automated trading system.

[0016] **FIG. 4** is another display from an automated trading system.

[0017] **FIG. 5** is another display from an automated trading system.