DYNAMIC INFORMATION DISSEMINATION WITHIN A TRADING SYSTEM.

FIELD OF THE INVENTION

The present invention relates to a method for use by an operator of a system for trading of financial instruments. By means of the invention, reports to and from the system of trades that have taken place outside the system may be carried out with an improved degree of clarity to users of the system.

BACKGROUND ART

When trading with financial instruments, there is usually a difference between the buying price and the selling price, a difference referred to as the "spread". For example, if the buying price for a certain instrument is ninety and the selling price is ninety-three, the spread will be three. Normally, all trades will be made at prices that are within the spread.

In a system for trading with financial instruments, a problem can arise if a trade is made within the spread, but outside the system, a so-called "off-exchange" trade. This can for example occur if two brokers agree on a trade within the spread, but then report the trade to the system at a point in time when the market has moved, which can happen if, for example, the buying or selling price has changed since the trade was agreed upon. In this case the reported trade can appear to have taken place outside the current spread, namely if the market movement was such that the current spread is outside the price of the reported trade. If this happens, the off-exchange trade will, for one thing, influence the statistics for that particular instrument in an undesired manner.

Within present systems for trading with financial instruments, the operator of the system can define whether or not trades which are made within the spread should be accepted by the system or not, and if they are accepted, whether or not the information relating to that trade should be disseminated to users of the system (e.g. brokers). An example of the problem that has been explained above

could be that the present spread is at ninety to ninety-three, and an off-exchange trade at ninety-one is agreed upon between to brokers. The trade can be agreed upon before lunch, and then reported to the system after lunch. The market price for the same instrument after lunch may have moved so that the instrument is traded at a spread between ninety-three to ninety five. Thus, when a trade is reported at ninety-one, this report may influence the statistics in an undesired manner, in the example the report will influence the statistics downwards in a manner which is incorrect.

DISCLOSURE OF THE INVENTION

There is thus a need for a method for use in a system for trading of financial instruments, by means of which reports for off-exchange trades can be received by the system and communicated to users of the system, for example brokers, without negatively influencing the statistics in the system.

This need is addressed by the present invention in that it discloses a method for use by an operator of a system for trading of financial instruments, by means of which method the operator of the system is given the possibility of choosing which information a user of the system is given access to regarding trades which are made outside of the system and then reported to the system, so called off-exchange trades.

The method comprises the steps of letting the operator define a first set of boundaries within which the off-exchange trades will be accepted by the system, and letting the operator define which sub-sets of a set of information about the trade that will be disseminated to users of the system, with the definition of the boundaries and the sub-sets of information being defined independently of each other.

Suitably, but not necessarily, off-exchange trades which have occurred within the first set of boundaries but outside of a second set of boundaries will be communicated to users of the system by indicating that the trade has occurred

outside of the second set of boundaries and by communicating to users of the system the price and quantity of the trade.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be described in more detail below, with reference to the appended drawings, in which

Fig 1 shows a problem to be solved by the present invention, and

Fig 2 shows examples of selections/settings for an operator of a system according to the present invention, and

Fig 3 shows price information to be displayed to a user of a system according of the invention, and

Fig 4 shows how a so called "ticker" may be altered according to the invention, and

Fig 5 shows how a trade report function may be designed according to the invention, and

Fig 6 shows a batch report according to the invention.

EMBODIMENTS

Figure 1 schematically illustrates one of the problems that can be solved by using the present invention: the graph for the "sell price" for a certain financial instrument is shown as a function of time. The term financial instrument in this context refers to such instruments as shares, options etc, which will be realized by those skilled in the field.

At a first point in time, t_1, the sell price is at a certain level, with the buying price being lower, and with the price difference between buy and sell being referred to as the "spread." The spread at t_1 is indicated in fig 1 by means of a double arrow. All deals or trades which are carried out at a certain point in time will thus be with prices inside the spread for that point in time.

Consider the following situation: all trades are normally carried out within an automated system, but two brokers agree to a trade outside the situation, e.g.

verbally or otherwise, something which is permitted by the system, and which is referred to as "off-exchange" deals. The deal is agreed upon at t_1, with the price agreed upon being well within the spread for t_1. However, the two brokers don't report their deal until a later point in time, t_2 . As indicated in fig 1, at t_2 the selling price for the financial instrument in question has gone up so much since the time when the deal was agreed upon that the deal is outside of the spread for t_2. If the system were to enter the deal into the statistics for the instrument in question and communicate it to the users of the system (brokers etc), the deal in question would appear to be an anomaly, and if the quantity traded is large enough, such a deal would in an undesired manner influence the statistics for the instrument in question.

In conclusion, the problem arises if an off-exchange trade has been made and is reported at a point in time when the price for that trade is outside the present spread.

The invention discloses a number of choices which can be made by the operator of the system to handle situations involving off-exchange trades outside the present spread vis-à-vis the users of the system, primarily focused on which information will be communicated to the users regarding such trades. In addition, and preferably to be used in combination with the choices or settings made by the user of the system, the invention introduces a number of choices and/or new sets of information to be communicated to, or handled by, the users of the system.

These choices and/or settings will be described in the following with reference to figs 2-6, which are examples of menus presented to the operator (fig 2) and the users (figs 3-6). However, it should be pointed out that the layout of these menus are merely examples, other layouts with the same end result are well within the scope of the invention. In addition, it can also be pointed out that not all of the settings or choices in the menus used to illustrate the invention need be present to make the invention work.

Fig 2 shows a menu for use by an operator of the system, and comprises settings and choices to be made by the operator regarding off-exchange trades.

One section of the menu involves the following matching rules, which will be applied to the trade report:

Examples of spread check rules – the values which can be chosen are "within spread", "at spread", "no check", and "missing price OK". "At spread" would here mean that if the spread is buy 100 – sell 103, then trades for exactly those values are at spread, while "within spread" would mean trades in between those values. "Outside spread" is the situation described above, and in order to accept such trades the system should be configured with the rule "no check".

Internal spread check rule – same as spread check rule, but used if the report is registered internally by the exchange.

Price tick check – the system will check that the price reported is according to the applicable so called price tick tables, e.g. steps of 0.25. If the price tick check is not used, trades can be reported in other steps.

Minimum and maximum volume: the largest and/or smallest volumes that should be allowed as off-exchange trades.

Allow interbank: decides if off-exchange trades shall be allowed between different customers.

Allow internal within participant: decides if off-exchange trades shall be allowed within one customer.

If the trade does not meet the matching rules, the trade will not be executed by the system and an error message will be sent to the user who reported the trade.

In addition to the matching rules described above, the invention also comprises choices that are available to the operator of the system regarding which information about trades that will be communicated to users of the system. It should be pointed out that the matching rules and the communication rules which will be described below are independent of each other, i.e. any matching rule can be chosen in combination with any communication rule. This is one of the basic principles of the invention, while the exact rules shown can be varied or other rules added while staying within the scope of the invention.

The information rules available to the operator of the system are the same as those listed above. An example that can be given is the spread check rule, which is the basic rule that governs the information. Examples of available values are "within spread" and "no check". If the rule that is chosen is satisfied by a trade, then a first sub-set of operator-defined information will be communicated to the users of the system, and if the rule is not satisfied by a trade, then another sub-set of operator-defined information will be communicated to the users of the system, as will be described in the following.

As can be seen in the menu in fig 2, and as has been mentioned previously, there is a possibility for the operator to define two different sub-sets of information for communication to the users of the system. One of the sub-sets will be communicated for trades that fulfil the "Dissemination" or "Information spread check rule", and the other will be communicated for trades that do not fulfil the "Dissemination" or "Information spread check rule".

The information to chose from within the two sub-sets is identical, something which is not necessary according to the invention but should be seen merely as an example. The information in the sub-sets is as follows, each piece of information pertaining to a particular commodity or instrument for the current trading cycle/day:

- Last – last traded price

- High – highest traded price
- Low – lowest traded price
- Open – opening price
- Trade report price – a parameter that will be explained below.
- Last quantity – quantity of the most recent trade
- Turnover – the total trade volume so far during the day in question
- Trade Report Quantity - a parameter that will be explained below.

The possibilities shown in fig 2 and described above are the possibilities open for an operator of the system, which define the information that will be communicated to the users of the system. As a logical consequence, the invention also comprises the communication of said information to the users in a manner that will be described below.

It should be pointed out that all the information communication described below will be subjected to the "Dissemination" or "Information spread check rule", as described earlier.

When communicating the latest deal in a certain commodity or paper to a user of the system, a menu similar to the one shown in fig 3 may be used. Each horizontal line contains information regarding the latest deal in a certain commodity or paper. If a trade outside the current spread were to be displayed to users, this might confuse the users or lead them to mistaken conclusions. In order to avoid this, but with a retained possibility to display such trades, a system according to the invention will not show the same information as displayed for deals within the current spread. Thus, one way of indicating to the user that the trade has taken place outside the current spread is shown in fig 3: only the price and quantity will be communicated to the user (Trade report price and Trade report Quantity from fig 2), thus giving the user the information while at the same time still enabling him to identify the deal as an off-exchange trade which has taken place outside of the current spread.

In addition to that which has been described above, a system according to the invention also allows the operator to define different types of off-exchange trades, the current type being communicated to a user of the system. One example of how this might be embodied is shown in fig 4, which shows another user interface, a so-called "ticker". This means that each horizontal line in fig 4 shows a trade in one paper or commodity, with the lowest line showing information about the most recent trade. One column has been added according to the invention, the column denoted as TR ID (trade ID), in which the type of trade report is communicated to the user. The type of trade report can be defined by the operator of the system, which means that the types shown in the drawing are merely examples, with some of the types shown having the following meanings:

SP: Special

XTCT: crossing trade for combination

When a user of the system enters trade reports into the system, the invention also accommodates off-exchange trades outside the current spread. This is done by letting the operator of the system define a number of different types of off-exchange trades and letting each instrument –commodity or paper - in the system be associated only with a sub-set of said number of different types of trades. An example of this is shown in fig 5: a menu for a user for entering trades into the system comprises the possibility of entering the ID of the commodity (VODA2K125OC), as well as the price and quantity. Also, which is according to the invention, a parameter called Trade Report ID is entered by the user, said parameter being representative of which kind of off-exchange trade this particular trade is.

According to the invention, there can be a linkage between each instrument type and the Trade Report ID, so that not all kinds of trade reports can be performed with all kinds of instrument types.

In addition, according to the invention, it is also possible to let the operator of the system define different limits for different users, so that each user of the system may be associated only with an operator-defined sub-set of said number of different types of trades.

CLAIMS

1. A method for use in a computerized system for trading of financial instruments, by means of which method the operator of the system is given the possibility of differentiating between the information users of the system are given access to regarding trades which are made outside of the system and then reported to the system, so called off-exchange trades, said method comprising the steps of:
- defining a first set of boundaries within which the off-exchange trades will be accepted by the system, said defining being done by the operator of the system
- defining which sub-sets of a set of information about the trade that will be disseminated to users of the system, said defining being done by the operator of the system
with the definition of the boundaries and the sub-sets of information being defined independently of each other.

2. The method of claim 1, according to which method off-exchange trades which have occurred within the first set of boundaries but outside of a second set of boundaries will be communicated to users of the system by indicating that the trade has occurred outside of the second set of boundaries and by communicating to users of the system the price and quantity of the trade.

3. The method of claim 2, according to which the first and second set of boundaries are the same.

4. The method of claim 2 or 3, according to which said communication to the users is carried out by only communicating to users of the system the price and quantity of the trade.

5. The method of claim 1, according to which the operator of the system can define different types of off-exchange trades, and communicates to the users of the system which such type each off-exchange trade is.

6. The method of claim 5, according to which said information is communicated to the users of the system along with information about all deals made in the system.

7. The method of claim 1, according to which the operator of the system may additionally define a number of different types of off-exchange trades, with each instrument in the system being associated only with an operator-defined sub-set of said number of different types of trades.

8. The method of claim 7, according to which each user of the system may also be associated only with an operator-defined sub-set of said number of different types of trades.

9. A computerized system for trading of financial instruments, in which system an operator of the system can differentiate between the information users of the system are given access to regarding trades which are made outside of the system and then reported to the system, so called off-exchange trades, said system comprising first defining means for letting the operator of the system define:

- a first set of boundaries within which the off-exchange trades will be accepted by the system,
- which sub-sets of a set of information about the trade that will be disseminated to users of the system,

said first defining means letting the operator define the boundaries and the sub-sets of information independently of each other.

10. The system of claim 9, further comprising first communicating means for communicating to users of the system off-exchange trades which have occurred within the first set of boundaries but outside of a second set of boundaries, the first communicating means further being adapted to indicate to said users that

the trade has occurred outside of the second set of boundaries and to communicate to users of the system the price and quantity of the trade.

11. The system of claim 10, in which the first and second set of boundaries are the same.

12. The system of claim 10 or 11, in which said first communicating means are adapted to only communicate to the users of the system the price and quantity of the trade.

13. The system of claim 10, including second defining means enabling the operator of the system to define different types of off-exchange trades, and second communicating means for communicating to the users of the system which such type each off-exchange trade is.

14. The system of claim 13, in which said second communicating means communicate said information to the users of the system along with information about all deals made in the system.

15. The system of claim 10, including third defining means for enabling the operator of the system to additionally define a number of different types of off-exchange trades, and in which system each instrument in the system is associated only with an operator-defined sub-set of said number of different types of trades.

16. The system of claim 15, including means for letting each user of the system also be associated only with said operator-defined sub-set of said number of different types of trades.

17. A method for use in a computerized system for trading of financial instruments, the method comprising the step of:

- enabling a first user of the system to carry out trades outside of the system and then report said trades to the system, so called off-exchange trades,
- enabling a second user to take part of sub-sets of information about said off-exchange trades which are disseminated by the system to the second user,
- letting the system reject off-exchange trades which are outside of a first set of boundaries,
- letting the operator of the system define, independently of each other, said sub-sets of information and said first set of boundaries.