LOSS RISK MANAGEMENT ACROSS MULTIPLE VENUES

Cross Reference to Related Applications

This application claims priority to US provisional application 61/680,163 filed August 6, 2012, which is hereby incorporated herein by reference.

Field

Some embodiments may relate to managing risk related to losses.

Background

An entity may risk money (e.g., through a stock exchange by buying a financial instrument such as a security). Such risks may result in losses to the entity over time (e.g., by selling a security at a lower price than it was purchased).

Brief Description of the Figures

Figure 1 shows an example system that may be used in some embodiments.

Figure 2 shows an example method that may be performed in some embodiments.

Summary

~~The following should be understood to be embodiments, not claims.~~

~~A. An~~According to a first aspect, there is provided an apparatus comprising: a risk manager configured to: receive reports of trading activity of a plurality of trading entities from a plurality of trading venues, calculate losses of the trading entities over time based on the reports of trading activity, and report the losses to the plurality of trading venues in substantially real time; and a trading venue of the plurality of trading venues, in which the trading venue is configured to: compare an amount of reported losses of the trading entity to a threshold amount of losses allowed for the trading entity, in which the threshold amount of losses allowed is based on an amount of collateral from the trading entity held by one or more collateral holding entities, and halt trading by the trading entity if the amount of reported losses exceeds the threshold amount of losses.

~~The apparatus of claim A, in which~~ In an embodiment, the trading entity includes a high frequency algorithmic trader. ~~The apparatus of claim A, in which~~ In an embodiment, the threshold includes a plurality of

thresholds that cover different amounts of time such that larger losses are allowed over larger time amounts. ~~The apparatus of claim A, in which~~ In an embodiment, the trading entity includes a market maker and the one or more collateral holding entities includes clearing houses. ~~The apparatus of claim A, in which~~ In an embodiment, the trading venue is configured to receive an indication that a collateral holding entity of the plurality of collateral holding entities has increase collateral held on behalf of the trading entity, and in response, allowing trading by the entity again.

~~B. An~~ According to a second aspect, there is provided an apparatus comprising: a trading venue configured to: determine matches between orders for financial instruments and facilitate trading based on said matches; report trading activity of a plurality of trading entities through the trading venue to a risk manager; receive a report of losses of each of the plurality of trading entities that occur through trades at the trading venue and a plurality of other trading venues; compare an amount of reported losses of a trading entity of the plurality of trading entities to a threshold amount of losses allowed for the trading entity, in which the threshold amount of losses allowed is based on an amount of collateral from the trading entity held by one or more collateral holding entities, and halt trading by the trading entity if the amount of reported losses exceeds the threshold amount of losses.

~~The apparatus of claim B, in which~~ In an embodiment, the trading venue is further configured to receive a report of collateral held on behalf of the trading venue for the one or more collateral holding entities, and calculate the threshold based on the amount.

~~C. A~~According to a third aspect, there is provided a computing device comprising: a processor; and a machine readable medium having stored thereon a plurality of instructions that when executed by the processor cause the apparatus to: receive reports of trading activity of a plurality of trading entities from a plurality of trading venues; calculate losses of the trading entities over time based on the reports of trading activity; and report the losses to the plurality of trading venues in substantially real time, in which a trading venue of the plurality of trading venues is configured to: compare an amount of reported losses of a trading entity to a threshold amount of losses allowed for the trading entity, in which the threshold amount of losses allowed is based on an amount of collateral from the trading entity held by one or more collateral holding entities; and halt trading by the trading entity if the amount of reported losses exceeds the threshold amount of losses.

~~The apparatus of claim C, in which~~ In an embodiment, the trading entity includes a high frequency algorithmic trader. ~~The apparatus of claim C, in which~~ In an embodiment, the threshold includes a plurality of thresholds that cover different amounts of time such that larger losses are allowed over larger time amounts. ~~The apparatus of claim C, in which~~ In an embodiment, the trading entity includes a market maker and the one or more collateral holding entities includes clearing houses.

Detailed Description

I. Example Embodiments

Losses for a trading entity may put that trading entity at risk of not being able to fulfill some of its trading obligations. Such risk may become heightened in an era of high frequency algorithmic trading where a glitch in an algorithm may cause one trading entity to very rapidly accumulate large amounts of loses and engage in large amounts of trades. A risk management solution may monitor trading activity of trading entities to prevent the trading entities from taking too many losses while still accepting more trading obligations.

Figure 1 illustrates an example of a set of entities that may operate together to facilitate loss risk management. Figure 1 illustrates a trading entity 101, three collateral holding entities 103a-c, two trading venues 105a and 105b, and a risk a manager 107. These entities may operate together to allow trading activity (e.g., trading of stock, equity, bonds, debt, swaps, forwards, derivatives, securities, financial instruments, and so on as desired). These entities may operate together to allow management of loss risk by the trading entity so that the broader market is not exposed to a risk of failure of a market maker and/or other (major) trading participant in the market.

Trading entity 101 may include an entity that trades in a market for one or more financial instruments. A trading entity may include a market maker in one or more securities operating through one or more trading venues. A trading entity may include a hedge fund that may engage in trading activity through one or more trading venues. A trading entity may include a high frequency trader that may engage in trading through one or more trading venues. A trading entity may include any desired participant in any number of trading venues (e.g., a broker, a dealer, a market maker, an individual, a firm, a hedge fund, a mutual fund, a buy side participant, a sell side participant, a high frequency trader, a low frequency trade, an electronic trading system, a human trader, and so on).