Management," Kinzai Institute for Financial Affairs, Inc., issued on April 24, 2009, pp. 107-144

Non-Patent Document 2: Response to Basel II," Kinzai Institute for Financial Affairs, Inc., issued on March 31, 2008, pp. 195-199

[0010]

However, in the case of using the method of comparing a risk amount weighed by a risk weighing device with an actual value, it is impossible to perform effective ex-post verification when a confidence level α of VaR is high or when a number of pieces N of actual values is small.

[0011]

This is because, when a confidence level α of VaR is high, an actual value exceeding the VaR rarely occurs. For example, because 99.9% VaR with a holding period of one year is a risk amount which is considered to occur once in every one thousand years, an actual value exceeding the VaR rarely occurs. Moreover, when the number N of actual values is small, the abovementioned standard values become 0.

SUMMARY

[0012]

Embodiments~~An object~~ of the present invention ~~is to~~ provide a risk management device which solves the abovementioned problem, that is, it is impossible to perform effective ex-post verification when a confidence level α of VaR is high or when the number N of actual values is small.

[0013]

According to a first aspect of the present invention, there is provided a risk management device comprising:~~according to an exemplary embodiment of the present invention includes~~

a memory for storing actual total loss amounts of N periods; and

a processor connected to the memory,

wherein the processor is programmed to perform determination whether actual levels follow a uniform distribution on an interval [0,1], the actual levels showing confidence intervals of the actual total loss amounts in a total loss amount distribution calculated by a risk weighing device, by a goodness-of-fit test with order statistics for a uniform distribution.

[0014]

According to a second aspect of the present invention, there is provided~~Further, a risk management method according to another exemplary embodiment of the present invention is~~ a risk management method executed by a risk management device including a memory for storing actual total loss amounts of N periods and a processor connected to the memory, and the risk management method includes:

by the processor, performing determination whether actual levels follow a uniform distribution on an interval [0,1], the actual levels showing confidence intervals of the actual total loss amounts in a total loss amount distribution calculated by a risk weighing device, by a goodness-of-fit test with order statistics for a uniform distribution.

[0015]

With the configurations described above, the present invention enables effective ex-post verification even when a confidence level α of VaR is high or even when the number N of actual values is small.