



Apr 14th, 11:00 AM - 12:00 PM

A Risk Measurement of Caterpillar Stock since the 2008 Financial Recession

Samuel Mitchell
Illinois Wesleyan University

Julie Klink
Illinois Wesleyan University

Onyinye Undenze

Kent Larson
Illinois Wesleyan University

Jeungbo Shim, Faculty Advisor
Illinois Wesleyan University

Follow this and additional works at: <https://digitalcommons.iwu.edu/jwprc>

Mitchell, Samuel; Klink, Julie; Undenze, Onyinye; Larson, Kent; and Shim, Faculty Advisor, Jeungbo, "A Risk Measurement of Caterpillar Stock since the 2008 Financial Recession" (2012). *John Wesley Powell Student Research Conference*. 1.
<https://digitalcommons.iwu.edu/jwprc/2012/oralpres9/1>

This Event is protected by copyright and/or related rights. It has been brought to you by Digital Commons @ IWU with permission from the rights-holder(s). You are free to use this material in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/ or on the work itself. This material has been accepted for inclusion by faculty at Illinois Wesleyan University. For more information, please contact digitalcommons@iwu.edu.

©Copyright is owned by the author of this document.

Oral Presentation O9.1

**A RISK MEASUREMENT OF CATERPILLAR STOCK SINCE
THE 2008 FINANCIAL RECESSION**

Samuel Mitchell, Julie Klink, Onyinye Udenze, Kent Larson
and Jeungbo Shim*

Business Administration Department, Illinois Wesleyan University

Risk measurement has been a challenging and important task for all companies in recent years. Value at Risk (VaR) is probably the most widely used risk measure. Management and shareholders easily understand the risk level since VaR captures a firm's portfolio risks in a single number. Organizations have used different methods to estimate the maximum possible loss (VaR) at a given time period. The variance-covariance method assumes that asset returns are normally distributed. Historical simulation method is suggested to overcome this distributional assumption. Historical simulation method preserves any "heavy-tailed" properties since variance and co-variances of key risk factors are implicitly included. We measure the amount of risk that investors are exposed to from investing in Caterpillar stock during the recent financial crisis. We also compare the performance of risk measurement between these two methods.